



## Social Protection Discussion Paper Series

### **Community-Based Health Insurance and Social Protection Policy**

**Steven R. Tabor**

**March 2005**

Social Protection Unit  
Human Development Network  
The World Bank

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# Community-Based Health Insurance and Social Protection Policy

*Steven R. Tabor<sup>1</sup>*

March 2005

WORLD BANK INSTITUTE  
*Promoting knowledge and learning for a better world*



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<sup>1</sup> This report is a module for the World Bank Institute's Social Safety Net Training Program. It was prepared under the supervision and guidance of Dr. Azedine Ouerghi ([A.Ouerghi@Worldbank.org](mailto:A.Ouerghi@Worldbank.org)) of the World Bank Institute. Helpful comments on an earlier draft have been provided by Dr. Margaret Grosh, Dr. Alexander S. Preker, Dr. Eric de Roodenbeke, Dr. Oscar F. Picazo, and Dr. Gilles Dussault. The views and opinions expressed in the report are those of the author alone, and do not reflect the official position of the World Bank or any of its affiliated agencies. Comments are welcome, and should be directed to Dr. Azedine Ouerghi ([A.Ouerghi@Worldbank.org](mailto:A.Ouerghi@Worldbank.org)) or Dr. Steven R. Tabor ([S.Tabor@planet.nl](mailto:S.Tabor@planet.nl)).

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# Foreword

In this Discussion Paper Steve Tabor reviews the role of community health financing in providing financial protection against the cost of illness and improved access to basic health services for low income rural populations. It is one of a collection of reports commissioned by the Bank to understand better the policy options available to low- and middle-income countries that are trying to expand coverage, secure sustainable financing to pay for health care, and protect the population against the impoverishing effects of illness.

Throughout history, the poor relied on traditional healers and faith at the time of illness. Most conditions were not treatable. The cost of burials was often the most expensive part of a serious illness. But, as medicine evolved, the treatment of known conditions became both more effective, complex and expensive.

By the early 20<sup>th</sup> century, employment-based friendly societies and sickness funds began offering income support and access to doctors and hospitals at the time of illness. Over the next century, one of the great achievements in health care financing was the expansion of financial coverage to the whole population. With the exception of Mexico, Turkey and the USA, all OECD countries offer their populations universal protection against the cost of illness.

Yet, as in 19<sup>th</sup> century Europe, direct out-of-pocket health payments continues to be a distinctive feature of health care financing in many low- and middle-income countries. Household expenditure may account for up to 80 percent of total health expenditures due to: high user charges (official or unofficial) in both public and private facilities (hospitals, clinics, diagnostics, medicines, and health care providers); and health insurance premiums.

Several factors make the policy options for financing health care at low-income levels different from those at higher income levels. Low-income countries often have large rural and informal sector populations, limiting the taxation capacity of their governments. When a country's taxation capacity is as low as 10 percent of GDP or lower, it would take 30 percent of government revenues to meet a target of three percent of GDP health expenditure through formal collective health care financing channels. In most countries, public expenditure on health care is much lower than this, often not surpassing 10 percent of public expenditure, hence less than one percent of GDP of public resources available for the health sector.

A related set of problems is faced during the pooling of financial resources at low-income levels. Pooling requires some transfer of resources from rich to poor, healthy to sick, and gainfully employed to inactive. Tax evasion by the rich and middle class in the informal sector is widespread in low-income countries, allowing higher income groups to avoid contributing their share to the overall revenue pool. Without such pooling of revenues and sharing of risks, low-income populations are exposed to serious financial hardship at times of illness. The pooling that does occur tends to be fragmented along income levels, preventing effective cross-subsidies between higher and lower income groups.

Although 84 percent of the world's poor shoulder 93 percent of the global burden of disease, only 11 percent (US\$280 billion) of total global spending on health care (US\$2.5 trillion) reaches low- and middle-income countries. At the sub-national level, the rich often benefit more

from public expenditure and subsidies on health care than the poor. And scarce public resources that are available to the poor in many low-income and middle-income countries are often squandered on ineffective care.

Many low-income countries that are falling significantly behind in achieving the Millennium Development Goals (MDGs). Although no single mechanism of health care financing is likely to mobilize all the needed financial resources to achieve the MDGs, many local communities are introducing micro-level health insurance as one – albeit small – contribution to this agenda.

Such community financing schemes often evolve during severe economic constraints, political instability, and lack of good governance. Usually government taxation capacity is weak, formal mechanisms of social protection for vulnerable populations absent, and government oversight of the informal health sector lacking. In this context, community involvement in the financing of health care provides a critical albeit often insufficient first step in the long march towards improved access to health care by the poor and social protection against the cost of illness.

Based on an extensive recent survey of the literature and as indicated by the authors of this Discussion Paper, the main strengths of such community financing schemes are the degree of outreach penetration achieved through community participation, their contribution to financial protection against illness and increase in access to health care by low-income rural and informal sector workers. Their main weaknesses are the low level of revenues that can be mobilized from poor communities, the frequent exclusion of the poorest of the poor from participation in such schemes without some form of subsidy, the small size of the risk pool, the limited management capacity that exists in rural and low-income contexts, and their isolation from the more comprehensive benefits that are often available through more formal health financing mechanisms and provider networks.

Concrete public policy measures that governments can introduce to strengthen and improve the effectiveness of such community involvement in health care financing include: (a) increased and well targeted subsidies to pay for the premiums of low income populations; (b) use of insurance to protect against expenditure fluctuations and use of re-insurance to enlarge the effective size of small risk pools; (c) use of effective prevention and case management techniques to limit expenditure fluctuations; (d) technical support to strengthen the management capacity of local schemes; and (e) establishment and strengthening of links with the formal financing and provider networks.

Alexander S. Preker

Lead Economist  
Editor of the HNP Publications

# ABSTRACT

Of all the risks facing poor households, health risks pose the greatest threat to their lives and livelihoods. A health shock adds health expenditures to the burden of the poor precisely at the time when they can afford it the least. One of the ways that poor communities manage health risks, in combination with publicly financed health care services, are community-based health insurance schemes (CBHIs). These are small scale, voluntary health insurance programs, organized and managed in a participatory manner. They are designed to be simple and affordable, and to draw on resources of social solidarity and cohesion to overcome problems of small risk pools, moral hazard, fraud, exclusion and cost-escalation.

Less than 10 percent of the informal sector population in the developing nations has health coverage from a CBHI, but the number of such schemes is growing rapidly. On average, CBHIs recover between a quarter to a half of health service costs. As a social protection device, they have been shown to be effective in reducing out-of-pocket payments of their members, and in improving access to health services. Many schemes do fail. Problems, such as weak management, poor quality government health services, and the limited resources that local population can mobilize to finance health care, can impede success.

CBHIs should be regarded as a complement to, not as a substitute for, strong government involvement in health care financing and risk management related to the cost of illness. Government, and its development partners, can support the growth of CBHIs by ensuring that there is a satisfactory supply of appropriate health services, by subsidizing start-up costs and the premium costs of the poor, by assisting CBHIs build technical and managerial competence, by helping to foster development of CBHI networks, and by assisting CBHIs establish and strengthen links with formal financial institutions and health care providers to better manage covariate shocks and catastrophic health risks.

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## **I. Introduction**

### **A. Health Risks and Poverty Reduction**

1. Health security and improvements in health outcomes are an integral part of the global commitment to poverty reduction. National poverty reduction strategies reflect this commitment. Efforts are underway in practically all developing countries to improve quality, access, efficiency and effectiveness of health care.
2. Policy makers are well aware that a country's economic development is closely linked with the health status of its population. Improving access to affordable health care is therefore central to boosting growth and helping break the vicious cycle of poverty and ill health.
3. Inadequate health expenditures can undermine efforts to combat poverty because sickness reduces productivity, and investment resources may be redirected to meet health-related consumption requirements. Households exposed to great health risk uncertainty are less likely to take advantage of growth opportunities, such as investing in new technology or expanding existing businesses (Dror and Jacquier 1999, Jutting 2003, McCord 2001). Health problems can also undermine efforts to reduce poverty. For example, health-related defaults and repayment delays are a common cause of portfolio problems in micro-finance institutions (Wiesman and Jutting 2000).
4. Vulnerability to illness and injury is both a symptom and a source of poverty. This is because a family's vulnerability to health risks is linked to available resources: the fewer the resources, the greater the vulnerability. Vulnerability can also cause or exacerbate poverty: sudden illness or death of a major wage earner can plunge an otherwise financially stable family into poverty, or make existing poverty worse.
5. Of all the risks facing poor households, health risks pose the greatest threat to their lives and livelihoods. A health shock adds health expenditures to the burden of the poor precisely at the time when they can afford it the least. Even a minor health shock can have a major impact on a poor person's ability to work, and hence on their earning capacity. Moreover, given the strong link between health and income at low income levels, a health shock usually affects the poor the most (Dror and Jacquier 1999, Cohen and Sebstad 2003b).
6. Health related shocks affect household welfare because of potentially reduced earning capacity, forgone income, and the expenditures required to meet the cost of treatment. Beyond simply the direct health costs, the poor are particularly vulnerable to the pressure of lost income when a household member falls ill. When that occurs, other family members must take time away from productive activities to care for the sick household member(s).

7. Long-term illness, such as HIV/AIDS and tuberculosis (TB), can cast the poor into a downward spiral of ever increasing indebtedness and hardship. A poor household that has a member suffering from AIDS-related health problems experiences high medical expenses, high food expenses (since the AIDS patient often requires a special diet), and loss of productive time. If that person was the primary wage earner, this may also result in children dropping out of school to assist the household in supplying food through petty businesses or child labor (Weisman and Jutting 2000, His, Edmond and Comfort 2002).

8. With fewer assets, less control over assets, and lacking ways to exercise their legal rights to assets, women are much more vulnerable to health shocks than men<sup>2</sup>. Women are generally the main caregivers in their families. Whenever a child falls ill, whether they are treated at home or in hospital, the woman has the added burden of attending to the sick. Since short-term illnesses, particularly malaria and diarrhoea, are very common among children, the direct and indirect cost of dealing with these tends to be much higher in poor households with several young children, with the care burden falling heaviest on working women (Cohen and Sebstad 2003, Millinga 2002, Sebagini 2002, ILO 2003, Jutting 2003).

9. For ultra-poor women, adverse health events can have devastating consequences. In rural Nepal, for example, women report that illness is the most frequent and costliest of all risks faced, followed by death of an income earner, enterprise risks (crop failure, floods), and life cycle needs. Poor rural women diversify their incomes, save, accumulate assets and forge community ties in an effort to mitigate health risks. The poorest rural women manage health risks by reducing household outlays (i.e. eating less), increasing the number of working hours, borrowing from community groups, friends, relatives and neighbors, and turning to moneylenders (Simkgadam Gautam, Mishra, Acharya and Sharma 2000).

## **B. Health Insurance and Poverty Reduction**

10. Although all countries have some form of public provision of health services, few Governments are able to provide a full range of services to meet all healthcare needs. Shrinking healthcare budgets, inefficient delivery systems, poor service quality, and the imposition of user fees make it difficult for governments to meet the health care needs of the poor. Oftentimes, “free” health care delivery systems don’t work, and in practice, are never free: in some countries, public health care systems provide minimal services, and involve transaction costs, such as transport from the home to service providers, side-payments, and long waiting times, that may render the “free” services out of reach of the poorest groups. Imposition of user-fees and drug charges, although aimed at improving the financial soundness of the health system, have also contributed to behavioural changes, such as delaying or avoiding care, that may ultimately expose the poor to greater health risks.

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<sup>2</sup> Women also face some specific health risks that men do not: This includes gender violence, maternal health issues, and the risk of contracting HIV/AIDS within marriage.

11. Many developing country governments are reforming the way that health care is financed. Several countries are increasing Government funding for healthcare, localizing the management of selected health services, and improving the targeting of Government spending on the health needs of the poor. Health insurance has emerged as part of the reform drive in many countries, both as a way of augmenting financial resources available for care, and as a means of better linking health demand to the provision of services (Preker et. al. 2001).

12. There are several ways in which health insurance can improve the financing of health care. First, it can generate more money for health, since consumers may be more able to pay regular premiums than to pay large amounts when they fall ill. Second, it can contribute to greater value for health spending, since insurers can use bargaining power to demand better performance for their funding. Third, it can be an efficient way of allocating limited household resources for high-cost health events, by reducing the need for precautionary savings or coping mechanisms that ultimately exacerbate poverty (Box 1).

### **C. Health Insurance in a Social Protection System**

13. Health risks that require a household to pay for medical treatment are special concerns of poor households. The cost of each illness, injury or accident is generally one-time, and can range from very small, for simple medicines, to very high, such as for major surgeries. Illness is also associated with mass covariant risks, such as wars, epidemics or natural disasters. These health risks tend to be difficult (or impossible) to predict and affect many persons at the same time. Costs are greater because households face multiple losses (health, property) and because traditional coping mechanisms break down. The frequency with which health risks are likely to occur, and the household's limited ability to predict when they will be affected, and the cost of each event, implies that health risks generate a greater degree of uncertainty than many other sorts of risks.

14. From a health expenditure vantage point, the bulk of actual spending on health care is devoted to treating catastrophic illnesses faced by a relatively small proportion of a population. For example, in an analysis of health care outlays in rural China, Gertler (1999) reports that 5% of the households account for just over half of all rural health expenditures, and that 20% of the population account for 75% of all health care expenditures. He also finds that 94% of household medical expenditure in rural China comes out of household consumption, and that rural households are only able to smooth just 6% of their medical costs. Similar results, in terms of the concentration of health spending for catastrophic care, obtain in the industrialized nations as well (Economist 2004).

15. Households have many ways of avoiding, mitigating and coping with the financial consequences of health risks. This includes private savings, reciprocal lending, asset accumulation/sales, changes in labor allocation, reduced consumption, and participation in a variety of formal and informal savings or mutual benefit groups. Informal insurance

mechanisms, which involve reciprocal exchange through local groups, work reasonably well for some risks. However, all of these coping mechanisms may prove insufficient to meet health costs, particularly if hospitalization is involved and illness is prolonged. Furthermore, health expenses often come at a time when the financially responsible party is least prepared.

### **Box 1: Can Insurance Help the Poor Manage Health Risks?**

Insurance facilitate trades between uncertain states of nature, thanks to inter-personal pooling of risks. Insurance companies collect premiums in advance of the resolution of uncertainty. These premiums, and the returns they generate from investment, are used to finance insured risks and the overhead costs of providing the insurance service. Pooling risks, through insurance can be a highly effective way of managing health expenditures:

“Suppose that a typical African adult between the ages of 15 and 60 has 1 in 10,000 chances of experiencing severe illness or injury, resulting in a US\$3,000 hospital bill in any given year. If his hospital bill were spread over all 10,000 people, then on average, each person’s expected annual cost would be  $(.0001) \times (\$3,000) = \$0.30$  a year for insurance that covers such a catastrophic loss, thus transforming the low probability \$3,000 loss into a certain but small \$0.30 annual loss.. If an insurance company could assemble 10,000 people with this loss probability and collect \$0.30 from each of them, it would be prepared to incur the hospital expenses of one \$3,000 loss a year and if each person were to pay \$0.60 per year, the insurance could probably survive on a profit making basis” (Shaw and Griffin, 1995, p.145)

Would it be better, or more efficient, for the poor to save to meet the costs of emergency health outlays? In most instances, this would neither be efficient or feasible. For example:

“If a person faced with the same risk of illness or injury resulting in a \$3,000 loss were to rely on savings for protection, they would need to put \$60 a year under the mattress for fifty years and finally achieve (near the end of life) the protection that would otherwise have been available every year by buying the above insurance plan for \$0.60 a year (for a total lifetime premium of only \$30) (Dror 1999). If the same person were to take out a \$3,000 loan to cover the medical expenses, they would need to repay more than \$250 per year over 40 years (at 8% compound interest rate) to pay off the loan” (Brown and Churchill, 1999, p. 19).

16. Informal, individual coping strategies can never provide protection against some risks, and the poorest households often receive little or no protection from informal risk management devices. Morduch (1998) reports that low-income households are able to protect themselves against just 10 to 40% of the losses that they face, and that informal risk

coping mechanisms tend to be less accessible by poorer households since it is harder for them to acquire assets, build social capital, and maintain regular savings commitments required by group-based strategies.

17. There are a number of ways in which the Government can assist in the management of health risks of the poor. This includes, for example, improved provision and targeting of publicly provided health services to the poor; financing the inclusion of the poor in social or private insurance schemes; and by investing in programs that are complementary to improve health standards, such as clean drinking water, sanitation, and good nutrition, in poor regions.

18. There are also ways in which low income communities can improve the management of health care risks, in partnership with Central Government and other sources of care. Community-based health insurance (CBHIs) schemes are one such approach. These are local initiatives that build on traditional coping mechanisms to provide small scale health insurance products specially designed to meet the needs of low income households. They are voluntary schemes, and are typically based on concepts of mutual aid and social solidarity. They are designed to assist those in the rural and informal sector for whom other forms of health insurance are not as well-suited. As a risk-management instrument, CBHIs can play a major role in smoothing household expenditure patterns. They also allow households to limit social pressure on their own resources by establishing a pre-payment mechanism for healthcare outlays (Preker et. al. 2001, and 2004).

19. While the number of CBHIs are rapidly growing, there are only a few thousand schemes in existence in the developing countries today, and these provide coverage to less than a tenth of the developing world's population<sup>3</sup>. Many of these schemes are less than a decade old; few have been rigorously evaluated; and lessons of experience are still be acquired. While community healthcare financing schemes come in many shapes and forms, this module will focus on health insurance organized within a community framework for the benefit of the community. The module is divided into five sections. Section two discusses key characteristics of community based health insurance schemes, including lessons learned from experiences to date. The third section reviews key contextual, internal and risk-management problems faced by CBHIs, and the strategies they adopt to overcome them. Section 4 discusses ways in which Governments and their development partners can support CBHIs, as an integral part of a social protection system. A set of conclusions is presented in the fifth and final section of the module.

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<sup>3</sup> Excluding rural China, the proportion of those covered by such schemes in the developing world would be less than 5 percent.

## **II. Community-based Health Insurance**

### **A. CBHI: A Distinct Risk Management Instrument**

20. **A Community-Based Health Insurance Scheme (CBHIs)** is any program managed and operated by a community-based organization, other than government or a private for-profit company, that provides risk-pooling to cover the costs (or some part thereof) of health care services. Beneficiaries are associated with, or involved in the management of community-based schemes, at least in the choice of the health services it covers. It is voluntary in nature, formed on the basis of an ethic of mutual aid, and covers a variety of benefit packages. CBHIs can be initiated by health facilities, NGOs, trade unions, local communities, local governments or cooperatives and can be owned and run by any of these organizations (Jutting 2002). They may be organized around geographic entities (villages, cities), professional bodies (i.e. cooperatives or trade unions) or around health care facilities. They tend to be pro-poor since they strengthen the demand for health care in poor rural areas, and enable low-income communities to articulate their own healthcare needs. Many community finance schemes have evolved in the context of severe economic constraints, political instability, and lack of good governance. Usually government taxation capacity is weak, formal mechanisms of social protection for vulnerable populations absent, and government oversight of the informal health sector lacking. In such difficult contexts, community involvement in financing health care provides a critical first step towards improved access to health care by the poor and social protection against the cost of illness.

21. In many developing countries, formal insurance is viewed as the province of the rich. Informal insurance, by contrast, is already part of their daily lives. Many low income households actively participate in welfare associations such as burial societies, rotating credit societies, cooperatives or other reciprocal exchange systems. One of the innovative features of CBHIs is that it introduces a complex financial concept---health insurance---as an extension to an already familiar form of informal social interaction.

22. CBHIs are called by many different names, including: micro-insurance, community health finance organizations, mutual health insurance schemes, pre-payment insurance organizations, voluntary informal sector health insurance, mutual health organizations/associations, community health finance organizations, and community self-financing health organizations. There is little to distinguish one from another, except that some terms are more commonly used in one part of the world than another.

23. CBHIs differ from other forms of micro-finance in that they use an insurance mechanism, i.e. a financial instrument which, in return for payment of a premium, provides members with a guarantee of financial compensation or service on the occurrence of specified events. Unlike credit schemes, policy holders (or members) renounce ownership

of the contributions that they make. The premium is used for the insurer's on-going operations rather than to specifically benefit those who made the premium payment.

24. Community based health insurance differs from informal insurance or other traditional forms of reciprocal exchange. It offers ex-ante, well-defined protection with a more reliable premium, compared to traditional insurance, in which the transfers are made ex-post and the transfer amount unknown. Informal arrangements generally cover a variety of life-cycle, income and health risks, while CBHI is limited to defined health risks.

25. CBHIs are well-placed to harness information, monitor behavior and enforce contracts which are either too difficult or costly for the government or any private insurance agency. They reach a clientele that is different from that served by market-based insurers. Typically, CBHI clients have fewer assets; their incomes are lower; and their income flows often fluctuate considerably throughout the year than those served by commercial or Government-provided health insurance.

26. In a market-based insurance, the premium is based on an assessment of an individual's risk profile. For CBHIs, simplicity of contract requires that the premium be based on a community (rather than a household) rating. Normally, individuals in a CBHI don't have the choice between various types of plans. Unlike commercial insurance products, the limited scale of a CBHI limits scope for risk diversification. However, in a CBHI where participants know about the risk profile of others, there is scope for peer monitoring and group decision-making which is not available in commercial health insurance.

27. CBHIs face constraints related to their small size, limited access to management and technical insurance skills, and by the quality and accessibility of local health care service providers. CBHIs do fail, and when this occurs it is often due to weaknesses in management, financing, or a combination of the two. In addition, the poorest groups are unlikely to become members of CBHIs because they are generally unable to afford the premiums.

28. CBHIs often complement Government health care financing efforts. They generally provide supplementary insurance, over and above that which is covered by universal health care systems or social health insurance. Universal health systems pool risks across the population as a whole, although rising health care costs may limit their scope and quality because they are based on tax-financing. Social health insurance allows the pooling of risks across different groups, often with sliding premium scales for different categories of employees. But these schemes require the development of an administrative capacity to collect and manage large scale insurance funds—a capacity that is in short-supply in developing countries. They are also normally limited to urban, formal sector workers, although governments sometimes provide default options for the unemployed or destitute that may cover a small segment of the informal work force. For example, in the case of the social insurance programs in the Philippines (PhilHealth), special provisions

were made to provide subsidized social insurance coverage for the indigent using a combination of local government targeting, central government subsidies, and capitation payments to providers. But whether providing subsidies to extend social health insurance to the poor actually improves their access to and usage of effective healthcare services appears uncertain (Schneider and Racelis 2004).

## **B. Key Characteristics**

### **1. Geographical Focus, Size and Coverage**

29. Community based health insurance schemes were amongst the first social protection institutions to be established in the industrial market economies. In the Netherlands, mutual health insurance societies were founded by the guilds during the Middle Ages. After these were disbanded, medical doctors established insurance funds to stabilize their own incomes. The Friendly Societies of the United Kingdom, the Mutual Benefit Associations of France, Belgium, Germany, Japan and Korea, and the Fraternal Benefit Societies of Canada were the first institutions in their respective countries to offer health insurance. Over time, the growing political influence of these community-based institutions gave rise to social insurance programs, and ultimately to the spread of more elaborate social protection systems (OECD 2001)<sup>4</sup>.

30. In the developing countries, the institution of community-based health insurance is of a far more recent origin. In Sub-Saharan Africa, the majority of the CBHI schemes came into existence only in the 1990s. Reflecting a strong Francophone tradition of mutual health associations, CBHI are far more common in West and Central Africa, especially in Senegal, Benin, Burkina Faso, Cameroon, Democratic Republic of the Congo, Mali, and Togo, than in other parts of the continent<sup>5</sup>. Senegal has the longest tradition of CBHIs, with several schemes dating back to the early 1980s. In Kenya, Uganda and Ghana, several schemes originated in the 1990s as part of the search of mission hospitals for new sources of funds after experience with levying user fees proved unsatisfactory. Many of Africa individual CBHI schemes are small, with around 100 beneficiaries, while others, such as Tanzania's Community Health Fund, have nationwide coverage with networks that cover one million or more beneficiaries (Musau 1999)<sup>6</sup>. Even though Africa has been a pioneer in CBHI, promotion of these organizations remains largely driven by external organizations. Moreover, coverage of the African CBHIs remains low, at an estimated 8.2 percent of their target population (Waelkens and Criel 2004).

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<sup>4</sup> Community-based health insurance was also the earliest form of health insurance to be established in the USA. The first US health insurance program was founded in Baylor Hospital, in Texas in 1929 when a group of school teachers contracted with a local hospital to provide room, board and specified medical services at a pre-determined monthly rate.

<sup>5</sup> There is an extensive literature in the French language on the performance of CBHIs (i.e. health mutuals) in Africa, little of which is cited in this text. For an extensive review of the development of health mutuals in Africa, and a synthesis of the findings of the French-language literature on CBHIs, see Waelkens and Criel (2004).

<sup>6</sup> Relatively few CBHIs are to be found in northern Africa and the Middle East. Loew, Ochrop, Peter, Roth, Tampe and Rukner (2001) report on one case in Jordan.



31. Compared to Africa's CBHI's, Asia's schemes are larger (with the smallest having several thousand members), older, and involve considerable cost-sharing with Governments. CBHIs play an important role in the health systems of Bangladesh, China, India, Nepal, Philippines, and Papua New Guinea. They are also present, to a lesser extent, in Cambodia, Vietnam, Thailand, Indonesia and Sri Lanka. Several of Asia's CBHIs are owned and operated by large micro-finance organizations (i.e. Bangladesh's Grameen, India's SEWA), by cooperatives (i.e. OHPS ORT Plus Scheme of the Philippines), by large hospitals (i.e. Dhaka Community Hospital Health Card Programme), by community-development movements (i.e. Savodya Foundation schemes of Sri Lanka and India), by local governments (i.e. China's county level pre-paid health insurance programs), or by mission groups (i.e. Nepal's United Mission Lalitpur Medical Insurance Scheme) (ILO 2000).

32. The largest number of CBHI beneficiaries are in rural China, in schemes that date back less than a decade. In 1993, following the introduction of the household responsibility system in agriculture, and the dismantling of the community welfare fund, China's uninsured population increased to almost 80% of the total rural population. Since then, the Government has been experimenting with various rural health pre-paid insurance schemes at a county and community-level. These combine fee-for-service insurance coverage, health savings, and co-payments. National and local governments provide 60 to 70% of total health care outlays for these schemes, some of which are voluntary and some compulsory (Gertler 1999).

33. CBHIs play an important role in the health systems of Argentina, Colombia, Ecuador, and more recently, Mexico<sup>7</sup>. They also play a role in the health care systems of Bolivia, Guatemala, Honduras, Nicaragua, Peru, and Uruguay. In Latin America, CBHIs are closely linked to trade unions and social funds. Argentina has the oldest and most extensive system of CBHIs in the region: some 60 percent of Argentina's population belong to *obras social*. These are non-profit insurance companies owned by a labor union in the relevant sector. There are some 360 such *obras*, covering about 10 million persons and their families. In addition, in each of the country's 24 provinces, there are *obra provincials*, which cover about 5 million public sector employees and their dependants (Jack 2000).

34. **Size:** Most CBHIs in developing countries are small, with only a few having membership pools comparable in size to those managed by commercial health insurance companies. Baeza et. al. (2002) analyzed 258 CBHIs cases, drawing on case study material available up to 2001, including 133 cases in Africa, 91 in Asia, 32 in LAC and 2 in the South Pacific. Of those reviewed by Baeza et. al., 22% had less than 100 members, 33% had 100-500 members, 28% had 500 to 10,000 members, 14% had 10,000 to 100,000 members and just 2% had more than 100,000 members. In parts of West and Central Africa where CBHIs have traditions going back several decades, most continue to be

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<sup>7</sup> Mexico has experiencing rapid growth in pre-paid medical organizations in the 1990s, and in April 2001, the Insurance Law was amended to recognize them as micro-insurance entities.

small. Atim (1999) reports that 70% of the mutual health organizations he surveyed in the late 1990s had less than 2,000 members, and that the average size mutual health organization was just 35 households with about 150 persons. Waelkens and Criel (2004) report that it has been difficult to scale-up existing CBHIs in Africa, with the average scheme covering just 8.2% of its target population.

**35. Contributions and Expenses.** Total annual member contributions from small CBHIs are generally less than \$1,000 per annum, which limits their ability to cover major health risks. Atim (1999) reports that the total annual contributions of an average CBHI in West Africa in the late 1990s was FCFA 275,000 (\$370), implying that one major hospitalization could deplete the CBHIs' entire reserves. Member contributions are on the order of \$1.5-\$2.5 per capita per annum in Sub-Saharan Africa and rise to as much as \$25-\$30 per capita per annum in low-middle income Asian nations (Philippines, rural China). The vast bulk of the premiums are used to pay health claims. Pilot schemes in Africa typically spend 5-10 percent of their total annual expenditures on administration, compared to 10-12 percent for commercial health insurance schemes. The main reason for the low administrative cost ratio is that many functions are performed by volunteers (ILO 2000 and 2004, and PHR 2004).

**36. Health Cost Recovery.** Research shows that CBHIs contribute to mobilizing resources for health care in the communities in which they have been introduced, but they cover only a minority of total health care costs. Ekman (2004) finds that the average share of health costs recovered by a CBHI is 25 percent, and that very few recover more than 50% of all health care costs. Despite the low rates of health cost recovery, there is strong evidence that CBHIs provide effective protection to scheme members by reducing out-of-pocket health expenditures and improving access to health care (Ekman 2004).

**37. Coverage:** The total coverage of CBHIs in the developing countries, as a whole, is not known with any certainty. Given that many CBHIs are still in the early part of their growth phase, or have only been recently introduced, it would be safe to conclude that less than 10% of the rural/informal sector population in the developing world participates in CBHIs<sup>8</sup>. Survey evidence shows that schemes in Kenya, Uganda and Tanzania, for example, cover from 1% to 7% of their target beneficiary population. Waelkens and Criel (2004), based on a survey of health mutuals in Sub-Saharan Africa, find that coverage of the target population is 8.2%. Those in the Democratic Republic of the Congo were somewhat higher, with coverage of several schemes in the target range of 20 to 75% of the target population (Musua 1998). Even amongst the long-established schemes in India, Bangladesh, China and the Philippines, the covered population is less than a third of the total target beneficiary group. While coverage is low, the number of CBHI schemes is growing rapidly, and as in parts of Europe a century ago, developing nation CBHIs are becoming powerful advocates for reform of the public health service.

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<sup>8</sup> China leads the world both in the number of CBHIs and in total membership.

## 2. Common Features

38. **Simplicity:** A defining characteristic of CBHIs is that they are simple. Many people in the informal sector cannot cope with complex procedures or forms. Some cannot read or write. Therefore, CBHIs are designed in a way that makes them simple (flat premiums, one-size benefit packages), easy-to-use and understandable for their members. Written contracts, if used, are brief. Forms are kept short, and record keeping is generally manual.

39. **Accessibility:** CBHIs are also designed to be accessible to their members. They are run and operated near their client base, simply because the poor or the rural population have neither the means nor the time to travel from their place of residence to distant insurance service centres.

40. **Self-management** Another unique feature of CBHIs is its community base. Unlike commercial insurance (where the insurer determines the offer of insurance) or social health insurance (where the government determines the benefit package), the benefit package for a CBHI depends on what the beneficiaries decide that they need, and the size of the benefit packaged is capped by the resources that they can commit. CBHI typically represent their members in negotiations with health providers, drug suppliers and others. Thanks to community decision-making, benefit packages can be changed rapidly, without the need to receive approvals from outside regulators or supervisors. Moreover, as long as the management of the scheme is conducted on a volunteer basis, administrative expenses of the scheme are contained at a small portion of the premiums (or covered by external subsidy).

41. **Revenue-Generating Capacity.** CBHIs are related to groups that have some revenue-generating capacity. Even in the rural parts of very poor countries, there are groups who have sufficient incomes to pool resources to mitigate against adverse health risks. Conversely, the poorest groups, who have no resources to spare, often cannot afford to participate in a CBHI.

42. **External Support.** Many CBHIs depend on continuing access to some form of external subsidy (Bennett, Creese and Monasch, 1998), and many depend on in-situ presence of outside facilitators. Such support may be provided from donors, central and local government, international NGOs, MFIs, trade unions, or cooperatives. According to Baeza's research (2002), in 86% of the 256 cases he reviewed, government contributes to the CBHI, and in 75% of the cases, private sources (including donors and INGOs) contribute to its operations.

43. **Complementing the Public Effort.** CBHIs tend to complement the publicly-financed health care service. Public sources contribute a large part of the financing of the

health care risks of CBHI schemes members, by providing preventative care services, and by subsidizing some portion of their health care service delivery costs.

### **3. Goals and Objectives**

44. CBHIs are formed with a variety of goals and objectives, other than to improve access and quality of health care. Sometimes schemes are started as a way of mobilizing or stabilizing revenues for hospitals and other health care providers. In other cases, CBHIs are established to replace free provision of health care services with fee-based service. In other instances, CBHIs have been initiated as a way of reducing the bad debts accumulated by micro-finance institution clients, and to diversify the services that micro-finance institutions provide (Del Conte 2002).

45. CBHIs provide (some) coverage for a defined set of primary health care expenditures, such as clinic and drug expenses. Most also cover part of the costs of hospital treatment. Accordingly, they perform two distinct health access functions. They act to pool high-cost health risks---a pure insurance function---and they facilitate entry of low income households to a public health care system that has its own arrangements for financing, pooling risks and providing services (Baeza, Montenegro and Nunez 2002).

46. CBHIs also contribute to improving the quality of health services. This is accomplished by striking agreements with health service providers to improve drug and medical supply availability; to improve cleanliness; to be more responsive to clients; to reduce waiting times; and to focus more attention on health education and client awareness. Thanks to collective bargaining power, CBHI monitoring and supervision of health providers also increases demand-side pressure for better management of health delivery services. By improving demand for health services, CBHIs also contributes to higher rates of health facility capacity utilization, and by augmenting funding, CBHIs improve the capacity of health facilities to provide drugs, equipment and other essential health supplies. By helping to improve beneficiary education, they foster health awareness and stimulate demand for improvements in community health conditions and for primary health care.

### **4. Institutional Arrangements**

47. How CBHIs are owned and organized has an important influence on their performance. Some are “owned” by the community, by local or central government (or both), by hospitals or clinics, by international NGOs or donors, by cooperatives or trade unions<sup>9</sup>. Those that are owned and managed by the local communities tend to concentrate

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<sup>9</sup> According to the meta-survey of CBHIs conducted by Baeza et. al. (2002), only minority of the schemes (11% of 128 reviewed) are defacto or legally owned by the communities. Only about a third are truly accountable to the community. Legal ownership varies and is often unclear-----some 45% of the cases it is either central or local government (or both); hospitals and clinics own around 15% of these, international NGOs/donors own another 25% of the schemes and only 2% are owned by for-profit entities.

their efforts on improving access and quality of local health care services. Those that are owned and operated by health care providers tend to focus more on augmenting and stabilizing health care revenues. Those that are owned or operated by NGOs and cooperatives, by comparison, tend to concentrate more attention on building membership ranks for participation in a set of complementary services. When CBHIs are operated by communities, all of the management functions are undertaken by the community members themselves, both with managers serving on a voluntary and paid basis. When CBHIs are owned and operated by health care providers (doctors, clinics or hospitals) or NGOs, accounting is conducted by the provider or NGO who is also responsible for all technical coverage issues, such as pricing, risk management, and care terms. In that case, the provider or NGO also absorbs all the risk.

48. Absent registration or formal articles of incorporation, the legal status of CBHIs tends to be somewhat unclear. Generally this is of little importance, as long as schemes remain below the size that would attract attention of the insurance regulators. Lack of a clear legal status can be problematic, however, particularly when CBHIs need to enter into large contracts with health care providers or pharmaceutical suppliers.

49. CBHIs take on a variety of institutional forms (McCord and Brown 2000). The vast majority operate as independent non-profit entities. Sometimes they are loosely affiliated with other small-scale CBHIs within a well-defined geographic region (i.e. a district or a province). The vast majority provide insurance on their own, while a very small number forge alliances with formal sector insurers<sup>10</sup> (such as FINCA in Uganda). Most CBHIs are specialized in the provision of health insurance, although some, such as the Grameen micro-insurance program in Bangladesh and the SEWA health scheme in India, provided integrated insurance products that combine health, life, property, death and maternity coverage. CBHIs may provide some other ancillary services in addition to insurance, such as operating clinics or dispensaries, providing ambulance services, or other forms of emergency assistance.

## **5. Operations**

50. In a community-based insurance model, the policyholders are the owners and managers of the scheme. Policyholders elect a group (typically one or two persons) of their members to act as volunteer managers. Management is responsible for determining what coverage will be offered and for setting premiums based on their understanding of what coverage the policyholder/owners want and can afford. Through participatory processes, the CBHIs determines the level of monthly contributions, and establishes rules for rationing the CBHIs' resources<sup>11</sup>. The CBHIs negotiates agreements with pharmacies and clinics, such as ex-post settling of accounts. The management teams are responsible for

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<sup>10</sup> An example of this would be the case of Finca Uganda.

<sup>11</sup> Some plans have characteristics of "managed care", in which mechanisms are built in to control cost-escalation, including gatekeeper nurses and physicians to control access to specialists, utilization reviews, and paying providers in ways that minimize incentives to over-treat (capitation payments or salary rather than fee for payment).

record keeping, holding regular meetings, and keeping separate accounts. The policyholder/owners contribute their regular premiums into the scheme, and these funds are normally deposited in a separate bank account. Each policy holder (and sometimes their family members) is given an identification (ID) card. In the event of illness, a person presents themselves to a CBHI staff or proceeds directly to a designated provider (pharmacy, primary health clinic, hospital), who uses their ID card to verify that they are a CBHI's member and provides treatment. When claims are made, the scheme uses its premium funds to cover claims. If an external service provider, such as a hospital, is involved, the scheme will likely make payments out of the bank account to the service provider directly.

51. **Pricing:** CBHIs use information about household payment capacity, penetration probability, expected risk of covered medical events, and an assessment of compensation and overhead costs to set premiums, all of which are generally estimated with considerable uncertainty. Prices are set on the basis of an experience rating for a given claims pool.

52. Most CBHIs use a simple premium structure, with different premiums for families of different sizes. Some of the larger and more mature CBHI's use sliding scales premiums and other pricing techniques to make coverage more affordable to low income households. Premiums are always set at a level that the community perceive they can afford, which in many low income countries, is often in the range of \$1-\$12 per person per annum. McCord (2002) reports that basic premiums varied from \$1.56 to \$11.68 per person per year for a sample of African and Asian CBHIs. In his research, the higher the premiums, the broader the range of coverage. Atim (1999) reported that the premiums paid for West African mutual health organizations generally varied by family size, with larger families paying progressively less per person. For example, the ADRK CBHI of Burkina Faso levies premiums that range from 500 FCFA for a family of up to 2 members to FCFA 850 for a family of up to 20 members.

53. For most CBHIs, coverage takes effect after a waiting period, ranging from 1 week to 3-4 months, after the first time that premiums are paid. Waiting periods are used to identify pre-existing conditions, to build up premium resources to cover claims, and to capitalize guarantee funds.

54. **Coverage:** Designing benefit packages that are simple, affordable, satisfy varied beneficiary preferences, provide services for which insurance is suited (i.e. pool risks rather than save for regular expenses), encourage healthy behavior, and are reasonably comprehensive is a daunting challenge, and there are tradeoffs amongst objectives. As the amount of insurance protection that a CBHI wants to offer increases, the size of the required premium also increases, making it less affordable, especially for poorer households. Most MHO's offer benefits related to major health risks, or some mix of hospitalization and primary health care. Adding some elements of primary care to the benefits package helps to demonstrate the advantages of scheme membership and to encourage members to seek early treatment for health problems. Drawing on the analysis

of over 100 test cases (Atim, 1998, pp. 17-21 and Bennett, Creese and Monasch, 1998, pp. 9-12), find that almost all CBHIs cover a combination of both high-cost and low incidence health events (such as emergency treatment of delivery complications, and limited hospitalization for illness and injury), and low cost, frequent events resembling primary care (including drugs, laboratory, supplementary care for mild illness beyond that provided by government). What is covered tends to change over time, depending mostly on the amount of accumulated reserves, and the community-specific perception of priority risks and benefits. The comparative costs and coverage provided by a small sample of CBHIs are presented in Table 1 below.

55. The provision of transport services for health emergencies is an important coverage issue in Africa. Lack of emergency transport services is directly linked to high maternal mortality rates, especially in remote rural areas. In some parts of West Africa, CBHIs operate a community-based stretcher service. In parts of rural Nepal, CBHIs and Governments share the cost of emergency medical evacuation (ILO 2003).

56. **Providers.** CBHIs provide access to health services through a variety of providers. Out of 132 CBHI schemes reviewed by Baeza et. al. (2002), health services were provided in 61% of the cases by a public provider; in 17% of the cases by the CBHIs' own facility; in 4% of the cases by a private provider; and in 18% of the cases by a mix of own, public and private providers. Baeza also found that only a minority (16%) of CBHIs negotiate with providers over the terms and costs of services to be provided, and arrange special deals for their members. The vast majority purchase health care services and drugs at prevailing market prices and tariffs.

57. **Public Health Role:** The close ties between CBHIs and first-tier medical services (i.e. rural clinics, health posts and dispensaries) makes it possible for them to play a valuable public health role. Some CBHIs implement health prevention programs, such as vaccination programs and bed-net sales. Many are involved in health education, especially in matters related to maternal and child health care. CBHIs tend to promote preventative treatment and primary health care to encourage early diagnosis as a way of containing care costs. Of the 67 African CBHIs studied by Atim (1999), some 42% had primary health care services covered in the package, 2 required screening, and a quarter offered their own primary health care services.

58. **Inclusion of the Poorest Groups.** The members of CBHIs are drawn from the informal sector, where information on incomes and expenditures is scant and subject to wide margins of error. There is very little information on whether or not the poorest groups join CBHIs, although within the low-income communities in which they are offered, those with higher incomes are more likely to join. Some of the larger CBHIs add a small surcharge or collect donations to help pay the premiums of the selected categories of poor households (Box 2). In some schemes, sliding scale fees and cross-subsidies are used to make insurance accessible to the very poor. For example, the Community Insurance Scheme under the Gonoshasthya Health Care System in Savar, Bangladesh has

sliding scales for premiums, renewal fees, consultations, and drug co-payments. In addition, profits from the schemes commercial activities are used to cross-subsidize premiums by the indigent groups(ILO 2002)<sup>12</sup>.

59. **HIV/AIDS Coverage:** Several CBHIs play a role in HIV/AIDS prevention and diagnosis, but treatment costs are generally well in excess of available premium resources. Moreover, some CBHIs explicitly exclude HIV/AIDS treatment or cap the level of risk incurred. The Altman Health Insurance Scheme of Tanzania, for example, excludes all costs arising from TB, AIDS, and cancer. Another example is Kenya's Chogoria Hospital Insurance Scheme, which excludes AIDS treatment costs over Ksh. 2000 per year. In Ghana, a 2001 survey showed that six of eight mutual health organizations covered HIV prevention and treatment services, but what was covered was primarily prevention services. A survey of CBHIs in Senegal found that none covered HIV/AIDS treatment, although many cooperate with NGOs in testing, prevention and health education.

**Box 2: Reaching the Poor: the Bukidnon Health Insurance Programme of the Philippines**

The Bukidnon Health Insurance Programme began in 1994 with the participation of the local government and the Philippine Medical Care Commission. As of 1998, it had 24,000 subscribers who received a package of in-patient, out-patient and dental services from accredited providers. The provincial government operates an indigent patient scheme in which the first year's insurance premium is supported by the Province and the second year's (and thereafter) by the municipality. A means-test is applied at enrollment, covering per capita power and water consumption, distance to the nearest health service provider, health awareness and a bonus for families that grow vegetables. In 1995, some 25% of the members received subsidies, or which 29% received a 50% premium subsidy, 25% a 37.5% subsidy, 26% a 25% subsidy and 10% a 12.5% subsidy on a premium of P720 (US\$15) per member per year.

Source: Soriano, Lomboy and Barbin (2002).

**C. Performance Lessons**

60. CBHIs are a new and emerging social protection technology in many parts of the developing world. Track records are short, and empirical evidence upon which conclusions about impact and sustainability can be reached are limited. There is clear evidence, however, that those in developing countries who have insurance have better

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<sup>12</sup> The Gonoshasthya Health Care System was started as a development project in 1971 and has evolved to become two-tier health provider with a 70 bed hospital and 4 sub-centers, covering 164 villages of the Dhaka and Gazipur districts.



health outcomes than those who don't. The main strengths of CBHI schemes are the extent of outreach penetration achieved through community participation, their contribution to financial protection against illness, and increase in access to health care by low-income rural and informal sector workers (Preker 2004).

61. Where CBHI's have been successfully introduced, they have reduced the amount that poor people pay in out-of-pocket payments when they seek care and they have contributed to more frequent utilization of health services. There is ample evidence that prepayment and risk sharing through community involvement in health care financing—no matter how small—increases access by poor populations to basic health services and protects them to a limited extent against the impoverishing effects of illness. Members of CBHIs are less likely to need to borrow or sell assets to cover health costs. They are also less vulnerable to social pressure to contribute to health financing requirements of others (Preker 2004).

62. CBHIs have contributed to an improvement in health service delivery, by augmenting user fees and public sector resources, by improving member's access to private providers, and by increasing and stabilizing the funding available for local stocks of medicines, supplies and health care personnel (Criel 1998, Dror and Jacquier 1999, Millinga 2002, Musau 1999). They have also contributed to improvements in community health standards, and by so doing, CBHIs help to keep health risks from occurring. They do this primarily by promoting the use of preventative and primary health care services, especially when these are included in the benefits package. In Rwanda, for example, a household survey found that the use of preventative health care services was four times higher for CBHI members than for non-members (PHR 2004).

63. CBHIs have also made an important contribution to social capital formation. In parts of Central and Western Africa, the impacts have been particularly impressive, both in terms of improving access to health care and in augmenting the voice of poor rural communities. A synthesis of 22 CBHI case studies, drawn from 50 test communities in West and Central Africa concluded (Atim, 1998, p. xii) :

“... Even now, they make a significant contribution to health care access and extending social protection to disadvantaged sections of the population by mainly targeting people in the informal and rural sectors. This also represents a contribution to equity in health care in the areas where they are active. Another area in which Mutual Health Organizations (MHOs) make a new - and in this case, original - contribution is that of democratic governance in the health sector.... This is a genuinely new contribution which reflects the role and origins of the MHOs as part of the growing and confident civic society that began to develop in Africa in the 1990s.”

**Table 1: Characteristics of Selected Community Based Health Insurance Schemes**

Characteristic/Scheme	Fandene Mutual Health Organization	Micro-Care	UCGM Sirarou	SEWA Integrated Social Security Scheme	Public Health Concern Trust
Country	Senegal	Uganda	Benin	India	Nepal
Services Offered Starting	1990	2000	1995	1992	1992
Size	287 persons	776	3,075 (1996)	32,000 (1999/2000)	35,000 (1999)
Community Participation	Democratically governed through general assembly, control committee, and governing body meet frequently. Managed by 5 volunteers.	Microcare Uganda Ltd is a non-profit organisation that establishes managed care arrangements between client groups (especially MFIs) and service providers. Groups negotiate managed care contracts.	Democratic participation in mutual health organizations general assembly. Members can participate in monthly meeting conducted at the village and communal levels. Scheme developed with the assistance of CIDR.	Program designed in response to members request. Premiums and benefits copied from United India Insurance when SEWA took over insuring their members. Community members participate in claims committee which review each claim, together with SEWA staff and a doctor.	Scheme was first established as a cooperative. Managed through voluntary services of local coordination committees, one-quarter of whom must be women, who collect premiums, and facilitate the use of services. Frequent meetings reinforce democratic management.
Membership	Rural families	Open to families – family considered as a minimum of four and part of a group of over 15 people.	Open to individuals and to families	Must be a member of SEWA (Women's Informal Sector Trade Union)	Families, with no ethnic, race or caste restrictions.
Premium	1,000 CFA Franc and 200 CFA Franc monthly fee per person. 3 month waiting period after first premiums are paid before insurance is effective.	Family of four pays annual lump sum fee of Ush.108,000 (\$62) or six monthly fee of Ush.67,000 (\$38). Additional family members over 16 pay Ush.36,450 (\$21) annually or Ush.19,238 (\$11) every 6 months. Children (Under 16) pay annual fee of Ush.17,550 (\$10) or Ush.9,263 (\$5) every 6 months. 2 week processing period before insurance is effective.	Annual premium (1997) was CFA 1,300 per person, CFA 3,700 for a family of 2-5 persons, CFA 7,500 for a family of 6-10 persons, CFA 12,400 for a family of 11-15 persons and CFA 18,000 for a family of 16 or more. Premiums are collected during the cotton selling period. Premiums can be paid on a credit basis for members who cannot afford to pay at once.	\$1.65 per year for member only. To get additional coverage for Husband's natural death, an additional \$0.51, to have husbands health covered, adds \$0.45. Premium can be paid using earnings from fixed deposits, annual payment or monthly payment.	Members must deposit between 25 to 50 paisa per day (equivalent of \$1.20 to \$2.40 per year). May be paid in one lump-sum or in two installments.  Families with less than 5 members must deposit Rs. 100 (\$1.40) per year, and those with more than 5 members must deposit Rs. 200 (\$2.80) per year.  Half of total premiums deposited at Katmandu Hospital

Benefit Plan	100% out-patient urgent consultation, 10 days hospitalization, 50% surgery costs, 75% of mid-wife and delivery costs, 50% discount given by local hospital to all services not covered.	All members can access the provider hospitals, including Nsambya, Rubaga, Kibuli, Kisubi, and Metro-Med Medical Clinic.. Casualty and outpatient services; In-patient services. Referrals to specialists within the hospital. Surgery, X-rays and laboratory procedures, Prescription drugs, Maternity. Dental care, Optical consultation. Excludes dental surgery, some elements of optics, intentional self-injury, mental illness, infertility, alcoholism and chronic illness, long-term care and medication of chronic illness. Microcare has set up check-in desk terminals at the scheme hospital where computer terminals monitor client details and service utilization data.	Covers 100% of hospitalization, deliveries and snake bite. Members must use the community health center and health post for deliveries and snake bites. Hospitalization provided through designated hospital. Part of a network of 9 Mutual Organizations that are serviced by a common hospital.	Medical coverage for hospitalization of at least one day, except for injuries. In-patient care with related medications and tests, plus grant for: Maternity, Cataracts, Dentures, Hearing aids, Single premium also provides death, widowhood, and property coverage). Excludes Pre-existing and chronic illnesses. Covers only expenses related to illness or accident that requires more than 24 hours hospitalization (\$27.27 annually). Maternity (\$6.82 grant), cataracts (\$27.27), dentures (\$13.64), and hearing aids (\$22.72) only covered for 'lifetime insurees'. Certain procedures (maternity, dental) only covered after one year.	Covers pre-defined set of general medicine, hospitalization, surgery, gynecological and obstetric services. A set of generic drugs are also covered. Members may use PHECT community clinics and the Katmandu Model Hospital. Services are provided by health assistants and doctors from Katmandu Hospital who visit twice a week at the community clinics. Patients with complex cases are referred to Katmandu Model Hospital if required. A referral sheet signed by a doctor of health assistant is required to use services at the Katmandu Hospital. Radiology and pharmacy services are excluded. Primary health care services are excluded from the insurance since these are covered by Government.
Co-Payment	50% of surgery and 25% of mid-wife and delivery costs.	Registration fee of Ush.1,000 (\$0.57) - Ush.1,500 (\$0.86) per visit. Coverage up to a Limit of \$195 per 8 months for in-patient treatment per patient.	None---all routine health services and drug costs are borne by households.	None (but restricted coverage tends to offset an average of 22% of members annual medical costs)	Members pay 50% of the cost of each treatment.  80% of the cost of a general annual medical check-up is covered.
Other	Linked to Mission Hopital Saint Jean de Dieu	Each member gets ID card. It is not transferable. Charge for replacement if lost.	Two funds maintained to provide loans to members for premiums and to pay premiums for indigent.	One-third of premium is government subsidy and one-third comes from GTZ endowment interest. .	Village development committees receive donations from donors and govt. to supplement premiums.

Development of MHOs in some parts of Africa has been so successful in fostering social solidarity that it has evolved into a community-driven *social movement* (Atim 1998, ILO 1998, McCord and Osinde 2002b, and Musau 1999). CBHIs have played a positive role in encouraging grassroots democratic governance by providing members with an opportunity to participate on a regular basis through group meetings, election of scheme officials, by providing volunteer services, and through general assembly meetings (PHR 2004).

64. As a risk management device, the main disadvantage of CBHIs are their vulnerability to weak management capacity, limited amount of resources that can be mobilized from low-income communities, frequent exclusion of the ultra-poor, few network economies<sup>13</sup>, small size of the risk pool, and their isolation from the more comprehensive benefits that are associated with formal-sector health insurance. Many of these problems are related to the context in which CBHIs are often launched, including the absence of a formal *insurance culture*, and a consequent lack of trust in insurance-type arrangements whereby clients pay in advance for a service that they may or may not receive in the future (i.e., why pay for a service you might not use?). Waelkens and Criel (2004) report that the reasons for low subscription rates for CBHIs in Africa include the poor quality of the health services, limited confidence of the people in the success of the enterprise, and the weak financial capacity of the target population. Other problems are related to weak CBHI management capacity. These include a failure to adequately manage insurance risks, unrealistic premiums, the absence of a community business culture, low controls for fraud, limited coverage (and hence high risk of adverse selection), absence of qualified staff trained in insurance, lack of marketing surveys to link products to perceived needs, limited marketing beyond the pilot phase, poor data handling and management capacities, and stiff competition from highly subsidized government hospitals and national social health insurance agencies (Ranson and John 2002, McCord and Osinde 2002b., Musau 1999).

65. There are certain settings in which CBHIs have performed well, and similarly, settings in which experience has been less than stellar. CBHIs are most likely to perform well as a health risk management device in settings where (i). there is a large, low-income informal sector that has sufficient capacity to mobilize resources to pay for health insurance; (ii). health risks are a major concern to poor and vulnerable groups; (iii). health facilities are physically accessible; (iv). fees are charged for services in government clinics and hospitals; and (v). management of the health system has been decentralized; and (vi) where private provision of health care provides some measure of competition to public systems (McCord 2001b). Conversely, countries in which universal health care coverage, or social insurance coverage, is widespread and generally perceived to be effective and of high quality, are not good candidates for CBHIs. Even in conducive settings, those factors that have contributed to the long-lasting success, such as community solidarity, strong local leadership, and a reasonable modicum of management skills, may need to be nurtured for a period of several years.

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<sup>13</sup> CBHIs tend to be operated as autonomous businesses. While this reduces the risk that default in one scheme will contaminate another, it also slows the pace at which they can be scaled-up to boost coverage.

### III. CBHIs: Facing Challenges

66. Many factors threaten the performance of CBHIs. Some are a manifestation of the context in which CBHI is offered; others arise from way in which CBHIs has been developed, designed, and managed; and still others arise from the fact that health insurance influences incentives. In most cases, CBHIs have developed an array of good practices to overcome these problems, and in so doing, have evolved to make a long-lasting and meaningful contribution to the social protection of the poor and the vulnerable.

#### A. Contextual Considerations

67. **Poverty:** Severe poverty can impede the success of a CBHI. If most people are simply struggling to survive, they will be less willing to pay insurance premiums in advance to use services at a latter point in time. Use of co-payments to reduce the up-front cost of insurance and cross-subsidization (by members, donors and governments) are amongst the other ways that CBHIs make health insurance affordable even in very poor communities.<sup>14</sup> Many CBHIs have a solidarity fund that is financed by a small premium mark-up and is used to subsidize membership by the very poor. Some CBHIs have a sliding-scale for premiums based on income, and other CBHIs have a savings-scheme that allows households to set aside small amounts over time to pay their premium costs. Scheduling premium collection at the right time of the year can also help improve access to the poor, especially when their incomes are highly seasonal. CBHIs also can make health care more accessible to the poor by addressing a number of the non-financial barriers that deter poor households from joining. This includes bringing health service providers to remote villages and helping to change the attitude of providers to the treatment of the poor.

68. CBHIs have adopted a number of innovative approaches to make medical insurance affordable in very poor communities. In Peru, premiums are collected in the form of a portion of the annual potato harvest, which is then sold to finance health costs. In Rwanda, a combination of a health pre-payment (i.e. micro-savings) and very restricted insurance coverage was used to make the CBHI affordable even to the ultra-poor (Box 3).

69. A good performance reputation also makes a CBHI more affordable in the eyes of the poor. While affordability is linked to the absolute level of premiums, it is also related to the perceived return for the premium, and the confidence that a family has that the insurance will honour its commitments. The degree to which a CBHI's expenditures are transparent and the overhead costs reasonable influences affordability since people tend to view as "affordable" costs that they feel are justified.

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<sup>14</sup> For example, in South Borgou, Benin there are two mutual health organizations that have established solidarity funds to pay premiums for handicapped, elderly and destitute persons. There is also the example of a mutual health organization in Senegal in which members pay the premium for street children.

### **Box 3: Providing CBHI in One of the World's Poorest Nations**

User fees were introduced in Rwanda's hospitals in 1996, and thereafter the utilization of primary health care services fell to 0.28 consultations per year, one of the lowest in the world. At the same time, donors indicated that they would reduce their financial support to the health care system. In response, a health pre-payment scheme was launched by the MOH, with the assistance of USAID. After paying an annual premium of FRw2,500 (\$8) per family, members are entitled to a basic package that covers all services and drugs provided by their local health center, as well as ambulance referral and limited treatment at a district hospital. Health centers receive a capitation payment, and members pay a co-payment of FRw100 per visit. Each of the CBHIs contribute part of their collections (5-15%) to the district hospital to pay per-treatment charges.

Source: Schneider, Diop and Bucyana (2000).

70. **Awareness:** Many low income clients are unfamiliar with the concept of insurance<sup>15</sup> and they have a hard time distinguishing credit from insurance. Drop-out rates can be very high in cases where individuals feel that the benefits should correspond to the contributions they have made (i.e. a savings concept). Under-insurance, or the choice of an individual to buy less insurance than is needed or could be afforded, can occur when people don't understand the benefits that insurance can bring. CBHIs can reduce their exposure to information asymmetry (i.e. that they are aware of the benefits but the clients are not) by investing in beneficiary awareness and education, through control of the benefit package (i.e. preparing comprehensible packages) and in their role as negotiators with health care providers over prices of services.

71. A general lack of understanding about insurance also influences the nature of the benefit package. Insurance coverage for health emergencies would provide the greatest benefit to the poor, as the example in box 1 above illustrates. However, having only catastrophic coverage makes insurance much harder to sell to clients who don't fully understand the value of insurance. Covering only common health events raises the question of whether the poor would be better off with a flexible savings account rather than insurance. The solution is to provide coverage for a mix of hospitalization and primary health care services---this helps make the insurance service more desirable to target beneficiaries since all are likely to make some use of the scheme during the course of a year.

72. Clients must fully understand what they are buying before premiums are paid if they are to be expected to renew their coverage. Research has shown that when clients do

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<sup>15</sup> Cultural norms and values also play a role. If people see disease as a punishment for evil behaviour, they will not join a CBHI. In some parts of rural Benin, for example, saving money for a disease was seen to be "wishing oneself the disease".

not understand what they are buying, they will perceive that they are not getting their money's worth because they were unable to access the health care that they expected (McCord 2001). Those CBHIs that have encouraged effective communications and client education are rewarded by a high level of member participation and low dropout rates.

73. **Covariate Risk.** CBHI's are especially prone to covariant risks because of their small size and limited geographical focus. In practice, an individual's health is not independent of their neighbors and this is especially the case where regions are prone to natural disasters or epidemics. This implies the need for partnerships, either with donors or government, to cover large covariant risks. Some of the ways in which CBHIs have succeeded in managing covariant risk is to include policy limits on total payouts and to exclude categories of diseases or chronic conditions likely to pose large covariant risk. First-dollar coverage policies are sometimes used to ensure that the cost of treatment beyond a specified amount is either born by the Government or by the policy holder.

74. Often governments (and/or their development partners) provide implicit reinsurance to CBHIs for losses incurred during periods of substantial covariate risk. For example, a malaria epidemic in southwestern Uganda cost the Kisiizi Hospital Health Society about 8.5 million Uganda Shilling (\$6,500). As a result, in 1998, no more than 64% of the Societies expenditures could be covered by their premiums. The Ministry of Health accepted responsibility for the costs due to the epidemic, and although no formal reinsurance agreement was in place, reimbursed the scheme for their losses (McCord and Osinde 2002).

## **B. Design Features**

75. **Small Risk Pools.** CBHI's tend to be small. In a meta-review of 85 CBHIs, Baeza, Montenegro, and Nunez (2002) reported that 55% had less than 500 members, and a third had less than 100 members. Theoretically, no general rules on the minimum size of a CBHI can be given because this depends on the nature of the insured risks and the availability of reinsurance. Experience suggests, however, that very small schemes are difficult to sustain. Unlike larger insurance pools, the small membership pool of many CBHIs limits scope for risk diversification. As a result, there is a risk that a small policy base will either not track the historical mean of health costs, or will be unacceptably volatile.

76. Small risk pools make it prohibitively expensive to cover rare but expensive health risks. For example, imagine that the risk of the catastrophic health event is one in 10,000, and the treatment cost is \$3000 per event. Imagine also that the total risk pool is only 100 persons. If each of them pay what the person's expected annual cost would be  $(.0001) \times (\$3,000) = \$0.30$  a year, then the total premiums collected would be \$30 per year. Should one person in the small insurance pool contract this rare illness, the CBHI would be unable to cover the treatment cost. If instead, the insurance needed to pool adequate reserves to cover the risk of this rare illness by collecting adequate premiums from their 100 members,

they would need to charge (\$3,000/100) or \$30 per person as a premium in the first year, a sum that would be prohibitive for many.

77. On the other hand, smallness does convey important institutional advantages. Proximity enables social control, peer pressure, reciprocity and shared social values to be used to foster accountability and ensure compliance. In CBHIs where participants know about the risk profile of others, there is scope for peer monitoring to encourage healthy lifestyles, to minimize fraud and to discourage frivolous claims. In small schemes, coordination costs are lower and participation is easier to encourage. Moreover, the spirit of CBHI voluntarism contributes to social solidarity and inclusiveness.

78. CBHI's cope successfully with the problems posed by small membership pools in a number of ways. To avoid excessive financial volatility, program coverage focuses on a smaller number of more "predictable" health risks. Financial risk is shared between the program beneficiaries (through co-payments) and providers (through capitation payments). Faced with volatile costs, premiums are regularly adjusted by member consent.

79. Cooperation amongst CBHIs, which involves sharing premiums and benefit payout obligations, is another way in which risk pools can be enlarged. This can take the form of establishing partnerships between a CBHI and a formal, regulated insurer. It can involve the use of guarantee funds (by some of the largest networks of CBHIs) and the buildup of technical reserves. In several countries, networks of CBHIs have been formed to help pool risks, to interface with government, and to share technical information and training. In some cases, CBHI have been integrated into existing micro-finance networks, with the savings pools of the micro-finance institution used to offset a certain portion of the insurance risk. For example, the Bangladesh Rural Advancement Committee (BRAC), a multi-faceted NGO that has provided nearly \$2 billion in micro-credit to some 70 million rural Bangladeshis. BARC has as developed a micro-insurance health initiative for its members in which insurance premiums and savings accounts are linked.

80. **Meeting High Start-up Costs** CBHIs are costly to establish---they require a detailed feasibility study, dedicated staff, and creation of new procedures and protocols<sup>16</sup>. All this must be accomplished even before there are adequate premiums to cover administrative costs. Although participation is vital to the success of CBHIs, many are actually formed in a "top-down" manner. Managers, reporting to a sponsor NGO, government or donor agency, will have a particular CBHI insurance model in mind and will mobilize village leaders or branches representatives to "implement" that model. To save costs, there may be little or no market research, inadequate costing/pricing of the new

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<sup>16</sup> The Partners for Health Reform (PHR 2004), a USAID supported entity, has employed a 9 step process to assist in the start-up of CBHIs in West Africa: 1) inform and educate the population about CBHI concepts; 2) establish a community working group to oversee CBHI start-up; 3) conduct a feasibility study with technical assistance providers; 4) establish several benefit package options; 5) disseminate the feasibility study results to the target population; 6) convene a general assembly meeting to agree on the benefits package, premiums, and operational modalities; 7) require a waiting period before people can begin to use the scheme; 8) hold a membership campaign, educate members and make provider contracts to strengthen the scheme during the waiting period; and 9) begin the full operation of the scheme.



product, no pilot-testing and no attempt at a planned roll-out of the new product (McCord, Wilson, Sagoe and Markowski 2002).

81. **Regional Networks.** One of the ways of reducing high start up costs (and expanding risk pools) is to develop regional bodies that can provide technical support to new CBHIs. For example, the GRAIM (Groupe de Recherche et d'Appui aux Initiatives Mutualistes) in the Thies region of Senegal has evolved into a forum for supporting the coordination of 21 mutual health schemes. The GRAIM provides leadership advice and capacity building services in scheme design, financial management and administrative systems, in addition to training mutual health committees. The GRAIM has also become an active proponent of CBHIs and represents regional schemes in negotiations with Government and health providers.

82. Participatory processes sometimes substitute for more methodical, higher-cost, start-up processes. In CBHIs founded on the basis of a high degree of participation and group solidarity, members are generally tolerant of product development processes that involve frequent changes in pricing, benefit terms, and management practices. One of the key findings from studies of mutual health organizations in Central and West Africa is that the degree of ownership and participation that members have in the design and operation of a CBHI scheme is directly related to their willingness to accept changes in its pricing, coverage and procedures (Musau 1999).

#### **Box 4: Negotiated and Agreed Fees**

The use of “negotiated and agreed” fees is one of the main characteristics of CBHI’s. This can contribute to under-pricing premiums. For example, ADRK (Association pour le Developpement de la Region de Kaya) is an rural development NGO, based in the town of Kaya, Burkina Faso. With financial support from Netherlands, and technical support from Reseau d’Appui aux Mutuelles de Sante (RAMS), ADRK prepared a feasibility study and started health mutuals in five locations. The first step in this process was an assessment of what likely health costs would be, and what the health costs are that families already pay. In discussions and negotiation within the communities, the families demanded that premiums be set at a far lower level than what they had historically paid, partly due to their skepticism that the CBHI would actually work. ADRK started its CBHI with a premium of FCFA 7,800 compared to an annual outlay of FCFA28,000 for healthcare per rural household. During the first year of operations, premiums were insufficient to meet expenses, and starting in the second year, it was necessary to more than double the premiums.

Source: Aliber and Ido (2002).

83. **Under-Pricing.** Many CBHI schemes have problems because of initially underpricing their operations. This depletes premiums almost immediately and leads to a vicious cycle of premium increases, reduced growth and renewals, increasingly slow payments to providers, service refusals and premium increases. Sometimes underpricing arises because communities under-value insurance (Box 4). The main solution to this is to price conservatively. The extensiveness of the benefits package, the size of co-payments, and the availability of other sources of co-financing (i.e. donor or government subsidies) also has an influence on the size of the premium (Table 2).

**Table 2: The Cost of CBHI Insurance**

	<i>NHHP / FINCA Uganda</i>	<i>Community Health Fund Tanzania</i>	<i>SEWA Health India</i>	<i>GRET Health Insurance Cambodia</i>
Basic premium	\$46.70 (4 persons at an average \$11.68 per person)	THS5,000 premium (\$8) per family	\$1.65 for client only	\$1.56 (per person)
Co-payments	\$0.66 per outpatient visit, \$1.33 per in patient visit	No co-payments Balance over coverage amount for specific items.	Balance over set coverage amount	\$0.26 for adult in home care plus the cost of medications
% coverage of average medical costs	90.7%	15%	22.0%	18% (hospitalization only)

Source: McCord 2001.

84. **Lack of Information to Set Prices.** One of the key components in determining the price of an insurance policy is the expected likelihood that a covered loss will occur. Estimating this likelihood accurately is very important because unexpectedly high claims can quickly bankrupt an insurance plan. Data is needed on age, gender, geographic distribution, out-of-pocket health expenditures and utilization data for major categories of health care (out-patient, in-patient, prescription drug use). In poor communities, historical loss information has often never been tracked, or if it has, the tracking is not specific to the clients likely to join a CBHI. In practice, CBHIs compensate for this lack of historical loss information by restricting benefit packages to services that are easier to price (i.e. regular primary care services), by capping coverage of hard-to-forecast health events (such as long duration hospital stays) and by negotiating payment terms with providers (such as payment per treatment) that are easier to predict. CBHIs also regularly adjust premiums as more information on actual costs and market penetration becomes available.

85. **Covering Insurable Risk.** Many CBHIs provide benefit packages that cover some amount of routine, predictable primary care and health education services. From a financial risk management perspective, households may be better off saving for these health care services, rather than bearing the cost of insurance overheads costs to pay for risks that households can well predict. On the other hand, excluding or providing low

reimbursement rates for primary and preventative care could discourage utilization of these cost-effective health care services. Moreover, by making highly-subsidized public health services accessible to the poor, through packages which provide first-dollar treatment for a wide range of illnesses, CBHIs provide a lifeline function that can help households prevent major health risks. Ultimately, greater utilization of prevention and first-line care, thanks to CBHI coverage, will reduce high-cost health risks.

86. To keep benefit packages simple, CBHIs typically provide one coverage package for all households. Since the risk profiles and risk-management capacities of households differ, one-size-fits-all coverage is bound to be less than fully effective and efficient as a health-risk management device for all families. On the other hand, one of the great efficiency advantages of CBHIs over other forms of insurance (or public provision) is that they can draw on location-specific information to craft benefit packages that meet the common priorities of their members. The CPH mutual health organizations in Nigeria, for example, apply an innovative approach to defining the benefit package. They interview the communities to identify the 10 ten most pressing health problems, and concentrate their coverage on these, with the aim of improving community health as a whole.

87. **Combating Attrition.** Drop-outs, or the failure of clients to renew their insurance, can be astonishingly high for some CBHIs, reaching 70 to 80% in some cases (Box 5). High rates of drop-out adversely affect the reputation of a CBHI, make it more difficult to manage partnerships with providers, raise marketing costs, and ultimately, can threaten the financial sustainability of the scheme. Even in well-managed, large CBHIs, a drop-out rate of 5-10% per year is not uncommon. There are a number of reasons for high attrition rates, including poor service, changes in price and/or services, lack of effective marketing, and conceptual misunderstanding of insurance.

**Box 5: Drop-Outs Threaten the Sustainability of Cambodia's GRET**

Of the three villages the Cambodia GRET CBHIs worked with in Rolous, 69% of the families participating in the first cycle did not renew in the second. In one village, only one family remained with the program. The declining penetration rate in the villages reduced the size of the risk pool and the premium inflow (covering mostly fixed costs), and made house-to-house service less efficient. Some of the reasons for high dropout rate included: a large increase in the premium; difficulties in acquiring the money to pay the higher premium in a short time; the timing of the premium acceptance period did not fit with some clients' income inflow cycles; dissatisfaction with the limited coverage; and when premiums rose, clients perceived no additional benefit for the increased cost.

Source: McCord (2001).

88. There are many ways that CBHIs retain their members. Providing good quality service is surely the most important approach. Fostering group solidarity, through regular meetings and member participation in appointing and supervising CBHI staff, also helps to discourage drop-outs. Carefully monitoring those policy holders who do drop-out, and taking action to rectify the problems that may have caused it (such as non-responsive care providers or indecipherable policies) has also helped in several cases.

89. **Management Capacity and Incentives.** Weaknesses in management capacity is one of the most serious problems facing the CBHIs. Transparent and sound management is needed to gain the member's trust. In practice, many CBHIs have managers who are not well-versed in insurance, finance, or in the basics of business management since these are managed on a voluntary basis and draw on existing members as elected managers. Weak management can lead to the rapid erosion of trust, and is one of the main reasons given for the demise of new schemes (McCord 2002).

90. Good management is needed to secure and sustain provider relations, to determine eligibility, to manage cash and collections, and to ensure the integrity of the operation. Where managers are elected by members, close relations between policy holders and the manager may make it difficult for the latter to sanction policy holders for non-payment of premiums or for other forms of non-compliant behavior. CBHI managers often lack skills in product design, pricing, marketing, accounting, claims verification, and reporting (Wright et. al. 2001). Rarely do they have the requisite skills needed to check the appropriateness of different forms of medical treatment. Few engage in market research or marketing, other than to distribute brochures. Record keeping is generally manual, and tends to be weak, and many CBHI managers are unable to prepare proper profit and loss statements.

91. CBHIs have overcome this deficiency through training, both in management and book keeping, but also in pricing of health risks. The relative success of the Zimbabwean and South African medical aid societies is related to their regular training programs which have produced large numbers of highly skilled management, who are able to price health risks fairly accurately and maintain proper accounts (McCord 2001).

92. Management information systems, either manual or computerized, are critical to the effective operation of a CBHI. It becomes extremely difficult to manage a program without the ability to track premium payments, utilization, and other costs. Integrating hands-on management controls with information systems can help CBHIs cut costs and improve service. Microcare (Uganda), for example, use a check-in desk of their own in their provider facilities to verify eligibility and track utilization. This information is fed directly into their computerized MIS system to ensure that only covered patients gain access to approved services and that facilities do not over-bill for services (McCord 2002, Noble 2001).

93. Management incentives have an important influence on the operation of CBHIs. If remuneration is independent of the size of the risk pool, management may have insufficient incentives to engage in marketing or awareness building. Where remuneration is linked to recruiting new members, policy holder renewals may suffer, causing attrition rates to rise. In recognition of the importance of aligning incentives with desired results, CBHIs have structured remuneration and staff performance monitoring systems to reward staff for increasing the size of the risk pool, educating members, and delivering good quality service (Box 6).

94. **Partnerships.** Many CBHIs find it difficult to maintain stable and secure relations with partners. The average CBHI involves partnerships with health providers (clinics, hospitals, dispensaries), pharmaceutical suppliers, financial institutions (for banking premiums), NGOs, local governments, donors, and in some instances, licensed insurance companies. There is a relationship risk and a reputation risk involved in each of these partnerships. Lack of high quality service provision on the part of any partner has a negative impact on all of the others. These relationships require a level of due diligence to minimize the potential risk to any of the partners.

**Box 6: Structuring Incentives and Performance Monitoring**

The Community Health Fund was introduced in Tanzania as part of the Government's Health Sector Reform program. Those selling the scheme get 5% of the premium collected, most of which goes to nurses who sell the scheme from government clinics. Government also matches premium payments. Communities actively monitor the quality of care and, in some instance, have intervened to replace a head of a dispensary who was not treating patients well.

There must be adequate incentives and capacities for initial sales and renewals if CBHIs are to reach an acceptable size. Mediplus's commissioned sales force, in urban Kenya, was able to quickly sign-up 60,000 covered individuals. A solid base of customer and product knowledge was crucial to the success of that marketing effort.

Source: McCord and Osinde (2002).

95. Delinquent payments by CBHIs to health care providers can cause critical partnerships to breakdown. Delinquent payments causes cash flow problems for the provider, which eventually leads to service rejection and client dissatisfaction. Conversely, poor quality service by health providers can make it difficult for the CBHI to attract and retain clients. For example, perception of poor quality service at Kitovu Hospital, in Uganda, made it difficult for the KPPS micro-insurance program to obtain new clients (McCord and Osinde 2003). Successful CBHIs build long-term, stable relations with trusted partners. Due-diligence is undertaken before partnership relations are entered into,

and clear written agreements summarize the responsibilities and obligations of all the partners.

### **C. Insurance Risk**

96. Moral hazard, adverse selection, and fraud occur when the insurance protection creates incentives for an individual to cause the insured event. Inadequate risk management procedures can lead to the escalation of health care costs which ultimately can make insurance prohibitively expensive for the policy holders. When risk control structures are weak, the insurance scheme will suffer financial losses until either the controls are improved or until the insurer goes bankrupt (Wouters 1998, Ahuju and Jutting 1993). Table 3 below compares various ways in which CBHIs control different insurance risks.

#### **1. Moral Hazard**

97. Moral hazard is defined as the possibility that people will act differently with insurance than without. As insurance lowers the price of care at the point of use and removes barriers to access, demand for the utilization of facilities will increase. Some provider payment mechanisms, like fee for service, give incentives to providers to supply unnecessary and expensive treatment to insured patients. The combination of these demand and supply factors may cause health costs to grow more rapidly than premiums, undermining the financial viability of a CBHI scheme.

98. There are many examples of insurance schemes that have quickly gone bankrupt because they failed to develop adequate protections against moral hazard. Over-prescription of drugs and services to insured patients has been reported in Kisiizi Hospital Health Society in Uganda and in the Masisi Scheme in the Democratic Republic of the Congo (Jutting 2000).

99. The use of peer monitoring to control the behavior of policy holders is probably the most important means that CBHIs use to combat moral hazard. In regions with a high degree of social solidarity, the threat of expulsion from a CBHI (both for policy holders and providers) is often sufficient to discourage abuse. In the case of CBHI's organized as mutual (or jointly owned) insurance entities, each policyholder participates in the profits or losses of the insurance each year. This may also reduce incentives for moral hazard.

100. The way in which fees are paid to providers can have an important influence on moral hazard. An insurance policy can agree to cover all costs but this is open to abuse, by both patients and providers. Generally, CBHIs agree to pay providers a pre-determined fee for each patient (i.e. a capitation payment), service provided or case treated, or the market price for a pre-determined list of treatments for illnesses or accidents covered.

**Table 3: CBHI Risk Management Approaches**

Insurance Risks	Strategy	Example
Moral Hazard	Pre-Selected Providers	Gonoshasthaya Kendra (Bangladesh) operates its own 70 bed hospital and 4 sub-centers to provide care for GK scheme members
	Claims Limits	PACO Soriano PDC health plan (Philippines) applied a limit of US\$2 for hospitalization aid; US\$50 for hospitalization expense, and US\$10 for medicine reimbursement during confinement
	Co-Payments	Chogoria Hospital Insurance Scheme patients have a co-payment of \$.36 for outpatient clinic services at a clinic and \$.55 for outpatient services at a hospital
	Loss Review	Microcare (Uganda) conducts regular reviews of its losses
	Exclusions	ADRK mutual (Burkina Faso) provides coverage for malaria, diarrhoea, respiratory ailments, wounds, skin infections, and difficult births. Chronic illness is excluded.
	Proof of Event	Daagaba Association (Ghana): all members are required to visit the sick person
	Member Identification	MUFEDE (Burkina Faso): membership cards, and visual verification that patient requires service before treatment
	Whole Family Membership	ADRK (Burkina Faso) requires that households join the scheme.
Adverse Selection	Required Group membership	Togo's Mutuelle des Taxi Motos de la Station Gaitou is restricted to taxi drivers serving the main station in Lome.
	Use of Pre-Existing Groups	ORT Philippines members initially those who use OHPS daycare facilities and satellite clinics.
	Waiting Periods	ADRK (Burkina Faso) has a 3 month waiting period for new members
	Tying CBHI to other services	Canadian Cooperative Insurance (China) links health insurance to micro-finance loan insurance.
	Cost Evaluation	Microcare (Uganda) conducts a formal actuarial review of its costs.
	Capitation Payments with Providers	ORT Philippines has a capitation agreement for its members with the cooperative teaching hospital ITMRC
Cost-Escalation	Negotiated Discounts	Grameen Kalyan Rural Health Program (Bangladesh) negotiated 50% discount on 15 essential drugs, others sold below market prices.
	Preset drug lists	Tanzania's Community Health Programme uses a pre-set list of approved "generic" drugs
	Near limit warnings	Medi-Plus (Kenya) provides notification to clients and health facilities when a client is about to reach his or her claim limit.
	Physical Identification of Policy Holder	Nepal's Lalitpur Medical Insurance scheme members have a card with registration number and a file is opened at the medical post. Patients can use hospital services by bringing insurance card and a medical post referral letter.
	Expense Verification	FAGGU (Senegal) verifies expenses against treatment claims and records
Fraud	Coverage Limits	Canadian Cooperative Insurance (China) provides a total claim limit of \$360/year per covered family.
	Forms Used to Verify Outlays	ORT Philippines uses signed and verified registration forms, referral letters for specialists, hospital in-patient forms for all those going to ITRMC, drug procurement, distribution and inventory forms, x-ray/ultra-sound/laboratory request forms, in-patient summary forms, and collection notices.
	Cancellation of Services	Medi-Plus Scheme (Kenya) cancels current and future care of anyone who provides false information on application
	Computerized Controls	Microcare (Uganda) has a check-in desk at hospital against which photo ID card is matched against digitalized photos.

## **2. Adverse Selection**

101. Adverse selection occurs when people with a high probability of “health loss” choose to buy insurance more than others, while those with low probability of loss do not join. This results in a higher insurance premium, which discourages those who anticipate needing less treatment than others from joining<sup>17</sup>. To combat adverse selection, commercial healthcare insurers will often require initial examinations to confirm the health of the potential client, and specific risk pools will be created for those that are of high health risk, and those that are of lower health risk. Linking premium rates to risk levels ensures that people of average health pay an average premium. Creating different risk pools is nearly impossible for CBHIs, because policy holders will find it difficult to understand why their neighbor pays a different charge than they do. In addition, the need to keep the policy simple prevents the CBHI from charging a differential premium, and hence premiums are based on community, rather than household rating.

102. Requiring a family to join is one way that CBHIs counter adverse selection. This is generally a good incentive strategy, except when the proportion of high risk families in the society is high (and then premiums would make the low risk families drop out). Waiting periods are used to prevent people joining right after the onset of an illness. Coverage exclusions for treatments for which patients have some control (i.e. elective surgery) and limited open enrollment periods, are other ways in which CBHIs overcome problems arising from adverse selection. Some CBHIs set lower premiums during registration periods and lower premiums for renewals rather than initial sign-ups to discourage adverse selection.

103. Another way of combating adverse selection is to require that a minimum pool size be reached before insurance coverage comes into effect<sup>18</sup>. Many of the CBHIs in West and Central Africa require that a minimum proportion of the target population sign-up for the insurance before it comes into effect. The use of community suasion to encourage solidarity amongst those of high and low health risks to join a CBHI can also be helpful in combating adverse selection.

## **3. Fraud**

104. Health insurance is subject to the risk of fraud, or deceptions deliberately practiced by patients, providers and CBHI staff and managers, to secure unfair or unlawful gains. To combat CBHI fraud, providers need provisions to deny service to the uninsured, to bill only for services rendered, and to render only those services that are truly required.

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<sup>17</sup> Free-riding is a particular form of adverse selection, and it occurs when self-interested individuals attempt to enjoy risk-sharing arrangements without reciprocity. For example, an insured individual may choose to drop-out of a health insurance scheme immediately after she has benefited from costly hospitalization coverage. Incentives for free-riding can be reduced by imposing a waiting period for insurance---this would also reduce the risk of defection after insurance benefits are drawn.

<sup>18</sup> The mutual health insurance companies in North America would establish new products only after 500 applications were approved.



Patients, staff and providers need to know that there will be sanctions for fraudulent claims.

105. Lack of professional management can make CBHIs vulnerable to fraud. In the case of Tanzania's UMASIDA CBHI, group leaders were selected from the local communities. They are not professional managers, yet have a great deal of financial responsibility. Several of them become frustrated with all the work involved and found themselves tempted by the premiums. Many of these groups have experienced a change in leadership because of fraud (McCord and Osinde 2002).

106. Encouraging a high level of community participation and over-sight, specification of suitable management policies and procedures, proper record keeping and accounting, and regular member review of CBHI accounts, are among the many ways that CBHIs prevent fraud. Proper record keeping plays an especially important role. Improving record keeping forms and procedures can help to prevent fraud from occurring in the first place. For example, fraud was identified as a particular problem in the Tanzania Community Health Fund (CHF). To help combat fraud, a new record keeping system was introduced in 2001. Under the new record keeping system, CHF membership cards were issued for each member, including all insured children. All health facilities were required to keep a patient register, a membership register, a financial ledger and a receipt book for cash received. They were also required to generate a daily and a monthly status report, summarizing all transactions of the fund. Initial signs are that the new record keeping procedures have helped to reduce fraud.

#### **4. Cost Escalation Containment**

107. CBHIs generally use co-payments<sup>19</sup>, deductibles<sup>20</sup>, and ceilings on benefit cover<sup>21</sup> to discourage frivolous claims and help control their maximum liability, and all have procedures in place to verify that treatment was received before the provider is reimbursed. Almost all CBHIs require clients to show an identification card when accessing treatment. Some require a second opinion that a patient is correctly diagnosed. Some institutions have their own staff at the provider facilities to confirm patient identity, verify that treatment is required, and assist with the logistics of receiving care. Almost all CBHIs have pre-determined approved treatments (such as approved or generic drug lists) and some operate their own clinics and drug posts to contain costs. Most CBHIs use pre-selected health care facilities so that they can identify those that will provide quality care and show integrity in their dealings with the CBHI. Most insurers also require some form of mandatory reference by the patient from a lower level of health care service before patients can report to a hospital. Utilization reviews can also be used to contain costs, but this is generally only done by the largest CBHIs. This includes: second opinion, pre-certification before treatment, concurrent review (having a nurse establish if continued hospitalization is

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<sup>19</sup> Co-payment charges range up to 75% of total costs in a variety of schemes.

<sup>20</sup> For example, the Babouantaou MHO in Cameroon asks patients to pay for the first 7 days of hospitalization.

<sup>21</sup> For example, the mutual health organizations in the Thies region limit coverage to the first 15 days of hospitalization.

needed), pre-admission testing, database profiling to compare service records of providers, intensive care management (having a nurse follow and manage cases that are thought to be expensive), generic substitution (substituting generic drugs for brand name drugs), retrospective reviews (carrying out an evaluation after discharge to identify any treatments that are unnecessary for which payment will not be made), and audits (ensuring that all services billed for were actually performed).

#### **IV. Fostering Successful CBHIs: An Agenda for Governments and Development Partners**

##### **A. A Supportive Setting**

108. **Good Growth.** Public policies that encourage inclusive economic growth can make a positive contribution to the operation of CBHIs for three reasons. First, as incomes rise, CBHIs become more affordable to a larger group. Second, a growing economy generates resources that can be used to augment the supply of public and private goods that influence private health outcomes, such as clean drinking water, maternal education, good nutrition, and preventative healthcare. Improvements in the supply of health care also boost the returns to health insurance, making CBHI a more attractive and affordable risk-management device. And third, households are more likely to allocate resources to a CBHI when they expect that their incomes will rise than when economic decline forces them to build-up precautionary savings.

109. **Internal Security.** CBHIs require a reasonable level of peace, security and social solidarity if they are to function well. In conflict settings, social solidarity breaks down, health costs soar, and the communities ability to pay for insurance plummets. Governments, and their donor partners, in an effort to safeguard the healthcare of non-combatants from the ravages of conflict, may intervene to provide health services at no cost. This, in turn, can inadvertently undermine the need for a CBHIs (Van Oppen 2001).

110. **A Strong Government Health Care Effort.** Health insurance is of little value if health care provision is weak. Governments are still the most important providers of health care services through public hospitals and primary health care clinics and services. The health services that CBHIs buys should be accessible and of acceptable quality. If neither government, NGOs or the private sector is providing local health services that are of suitable quality, then there is little advantage to pooling funds to manage health risks locally. Government can assist CBHIs by ensuring that one of the key preconditions to its success are met---i.e. by strengthening the supply side of health care provision, and ensuring that essential health care services are accessible to the poor.

##### **B. Integrating Health Risk Management into Social Protection Policy**

111. CBHIs should be understood to be a complement to, and not a substitute for, strong government involvement in health care financing and risk management related to the cost of illness. Ensuring that Governments recognize the potential contribution that CBHIs can play in complementing other efforts to manage health risks is the first step to weaving this instrument into a social protection system. In many countries, public policy makers treat health insurance as just another commercial financial service (albeit one designed to raise health revenues), and subject it to the regulations, requirements and promotion efforts accorded to a basket of non-bank financial market instruments. Rarely is the development of health insurance nurtured as a way of improving risk management options for the poor. Some governments, however, do promote CBHIs as an explicit component of a national social protection policy. In some cases, PRSPs (national poverty reduction strategy papers) identify the promotion of CBHIs as one of the means that will be pursued for improving health access and quality of health services (Box 7)<sup>22</sup>.

112. No single CBHI model is likely to perform well in all low-income countries. A diverse set of strategies and approaches for supporting CBHI development is generally appropriate. CBHI-support strategies should take into consideration local conditions, the degree of development of the CBHI movement, and the environment in which it operates. Moreover, at the initial stages of CBHI development, a diversity of approaches and CBHI models may be healthy for this encourages institutional experimentation and the tapping of local knowledge and expertise.

### **C. Health Sector Supply-side Interventions**

113. **Assisting Start-Up.** Health care providers are important partners for CBHIs. They have an important role to play in preventative health care and health education, which can complement CBHI financed services. At the earliest stage of CBHI formation, they can help MHOs carry out feasibility studies and set premiums for benefit packages.

114. **Decentralized Management to Reduce Health Cost Fluctuation.** If CBHI schemes are to be able to influence the quality of service, than providers must have a certain degree of decentralized, autonomy to manage their operations. Moreover, such autonomy should be used to reduce the financial burden of health shocks on the poor. Use of effective prevention and case management techniques by decentralized health care service providers can play an important role in limiting health expenditure fluctuations.

115. To be effective CBHI scheme partners, health care service providers will need to understand how to negotiate and provide services to an insured population. They will need to identify ways to improve quality of service and to monitor it. They will also need to be able to set prices and analyze different payment methods, provide accurate accounts, cost

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<sup>22</sup> Rarely, however, do PRSPs identify the policies or specific strategies that will be pursued to accomplish such objectives, the financing that will be allocated for the development of CBHIs, or the link between CBHIs and other aspects of health sector service delivery reform.

their services, and negotiate contracts. Governments can help to build these competences by decentralizing management authority and by building the technical and managerial capacity of health managers to partner effectively with CBHIs.

**Box 7: Integrating CBHI into the PRSP: the Senegal Case**

The Republic of Senegal has a long-standing tradition of CBHIs, which are termed mutual health organizations (MHOs). MHOs were highlighted in Senegal's 2002 Poverty Reduction Strategy Paper (PRSP) for their role in improving health care delivery, in general, and as a means to bridge community-led risk management with government-assisted social protection interventions.

Development of community-based health services is one of the five priority objectives of the Senegal's National Health Development Plan for the period 1998-2007. Community based approaches, building on the MHOs are integral to the approach adopted by the Government of Senegal to promote access to health services for the poor (p.44).

In terms of social protection policy, Senegal's PRSP includes a number of measures aimed at providing targeted assistance to vulnerable groups. Towards this end, the PRSP declares:

“In a more general way, and for all the above-mentioned groups, the Government will strive to encourage and strengthen formal and informal social safety nets, by facilitating especially access to social insurance agencies and by encouraging the creation of health care mutual insurance associations and other entities that confer civic and social solidarity (p.52)”

Source: Republic of Senegal. 2002. *Poverty Reduction Strategy Paper*.

116. **Competition in Provision.** Competition in the provision of health services creates a healthcare setting that is conducive to the effective functioning of CBHIs. In those cases in which CBHI schemes were able to choose amongst providers, they were better able to contain costs and to secure better services for their members. A mix of public and private provision of health services can contribute to competition in health service provision, even in remote, poor regions.

117. **Cost Recovery.** The use of cost-recovery measures for some parts of publicly provided healthcare services provides the population with an incentive to insure against health risks. Some forms of public sector cost recovery measures are more conducive to the operations of CBHIs than others. Ideally, health sector tariffs should be structured so

as to encourage consumers to take preventative health care measures, and to use primary health care services before tapping secondary or tertiary care.

118. **Alternative Payment Methods.** Health system performance is generally more sensitive to how funds are allocated to providers than to the total level of funding. As part of the decentralization of health sector management responsibilities, governments should allow alternative methods of health care service payment, other than fee for service. Capitation payments, and fee per episode payments allows better CBHIs cost control. This will also reduce some of the uncertainties that arise with costing in-patient care and managing catastrophic health incidents.

119. **Complementary Financing.** CBHIs never raise enough funds to meet all of the health costs of the poor. Public subsidies are an important way of reducing health care risks because they spread the cost of uncertain illness across healthy and sick times. In practice, all CBHIs augment public financing for health care, rather than replace it. A series of case studies report that CBHI schemes, where they are active and have several hundred members, can contribute between 4 to 13 percent of the total costs of operating district-level hospitals and health care centers (Musau 1999). Without public sector financial support for healthcare, service delivery costs would be prohibitive, and CBHI premiums unaffordable.

120. **Good Health Sector Governance.** Corruption can undermine the performance of a CBHIs. If service providers are able to demand side-payments in a way that diminishes between those who have insurance and those who don't, they may end up charging insured patients a higher rate than those who are uninsured<sup>23</sup>. Such side-payment practices could completely erode the benefits that members would expect to receive from their CBHIs.. One of the reasons given for high CBHI dropout in Cambodia's GRET scheme is that, after side-payments were taken into account, insured policy holders had out-of-pocket payments that were as high or higher than uninsured persons for the same treatment (McCord 2001b). For CBHIs to succeed, they must be able to estimate health costs accurately, and negotiate service provision terms with health care providers. If, due to corruption, health care costs can't be estimated accurately, or service provision terms can't be effectively enforced, then the effectiveness and efficiency of the insurance mechanism will be compromised. Public sector initiatives to combat corruption in the health sector can benefit CBHIs in two ways---by reducing health care provision costs and by enhancing the transparency and certainty in costing and pricing.

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<sup>23</sup> Gertler and Solon (2000) show that price discrimination in the provision of health services can undermine insurance, even in the absence of corrupt practices. In his study of the Philippines social insurance system, he finds that hospitals were able to use price discrimination---i.e. set higher rates for insured persons---to capture nearly all of the benefits from social insurance.

## **D. Subsidies**

121. Government (and development partner) subsidies play an important role in establishing and sustaining CBHIs. Even when there is a latent demand for insurance the relevant market may not exist because of problems of asymmetric information (e.g. moral hazard and adverse selection), the covariant nature of agricultural (i.e. rural income) risks, and high transaction costs. In many cases, insurance programmes emerge only on government initiative and depend heavily on government/donor subsidy in the early years.

122. Subsidies for CBHIs, as a social protection device, can be justified on poverty reduction grounds. An inability to borrow or to obtain insurance limits poor people's ability to smooth consumption over time. Their lack of access to credit and other forms of commercial health insurance means that they bear much more risk than the non-poor do. While most CBHI schemes do need some external funding support, subsidies should not undermine the commitment or responsibilities of members. The magnitude, duration and manner in which subsidies are provided to CBHIs can exert an important influence on performance and sustainability.

123. **Sensitization Subsidies.** Subsidies can be used to sensitize low-income communities about the merits of health insurance. Many low income communities are not aware of insurance, or think that it is a service that only the rich and salaried can afford. External financing support can be used to generate health consciousness, spread awareness about the benefits of joining a CBHI, and to train personnel and managers in managing health risk and investments.

124. **Start-up Costs.** The best form of subsidy is to provide assistance for meeting fixed start-up costs, because these distort staff, beneficiary and health care provider incentives the least. Most CBHIs don't have the initial capital (or access to credit) to fully meet start-up costs. This explains why CBHI products are often launched on the basis of incomplete information or by adopting "models" field-tested elsewhere. Start-up subsidies can be provided for a systemic product preparation process, which could include health risk evaluation, market research, product design, pilot-testing, staff training and product rollout.

125. **Subsidies for Including the Ultra-Poor.** Many CBHIs tend to exclude the ultra-poor simply because they cannot afford to pay the premiums. Governments can use well-targeted subsidies to pay for the premiums of the ultra-poor in CBHIs. This will improve the poverty impact of the schemes, and ensure that the health concerns of the ultra-poor groups are taken into consideration in the design of benefit packages.

126. **Subsidies for Operating Costs.** After start-up costs and financing the premiums for the ultra-poor, the next best form of subsidy is for meeting certain recurring administrative expenses, such as salaries of personnel, preparing accounts, and maintaining basic medical facilities, vehicles and equipment. Given the low capital base, and the time

required to build-up an adequate pool of policy holders, subsidies in the form of a time-bound grant or a low interest loan could be provided to cover the premium shortfall for operating costs. Thereafter, different forms of operating subsidies may be required as a CBHIs evolves (box 8).

**Box 8: Subsidizing Operating Costs: The ORT CBHI of the Philippines**

OHPS is a cooperative which has offered financial services to its members since 1994. They also operate a series of child care centers in the La Union Province of the Philippines. In the early 1990s, subsidies were provided by OHPS, the Government of Austria and the local government to equip and staff a series of community clinics and to hire personnel. Volunteers serving in the day care centers were trained to become community health workers and health promoters. A WHO expert introduced the notion of establishing a health micro-insurance scheme, entitled ORT, and provided technical assistance during the start-up phase during one full year. At end of first term in December 1995, the ORT scheme had enrolled 200 members and 800 insured persons (no exclusions on family or previous illness). These belonged to regions with daycare facilities and satellite clinics. Health care providers were salaried employees of the scheme, and were required to be at ORT clinics on specified days of the week. A doctor at a local hospital was hired, and paid on a capitation basis. After donor funding was finished, the local government provided financing to hire doctors and pay most of the running expenses of the community clinics. In 1999, a monthly average of 21% of the members made use of free medical consultation, 50% were given free antibiotics, 11% were referred for ancillary procedures and 6% were hospitalized. In 1999, the OHPS cooperative started organizing a monthly raffle to pay insurance ORT premiums for the indigent and to provide loans to those who were unable to pay their premiums. In addition to managing the CBHI, ORT staff give members training in early childhood care and development, detecting and managing common illnesses, personal care and hygiene, primary health care, and herbal medicine. They also host a nutrition month, and assist doctors in the clinics with family planning, child weighing, taking of vital signs, pre and post-natal care, dental care, environmental health and sanitation.

Source: Bargin, Lamboy and Soriano (2003).

127. **Subsidies for Catastrophic Coverage.** Subsidies may also be needed to assist CBHIs protect themselves from large, covariate health risks (Box 9). Subsidized guarantee funds or access to reinsurance can also help CBHIs manage high-cost health risks that they know very little about. For example, many CBHI schemes know very little about the risk of HIV infection in their membership pool due to a lack of voluntary testing and

counseling, nor are they aware of the impact it is having on their members. HIV/AIDS is a threat to the financial viability of many poor communities, and therefore by extension to their CBHIs. Donors could contract with CBHI schemes to provide subsidized treatment for patients or the schemes could explore various ways of incorporating HIV prevention and treatment packages in cooperation with NGO's that provide HIV/AIDS services (His, Edmond and Comfort 2002).

128. **Subsidies to Include the Poorest Households.** Some CBHIs exclude the poorest of the poor simply because they cannot afford to pay the premiums. Subsidies could be provided by governments to cover the participation of the poorest groups. These should be designed to encourage the participation of the poor, while enlarging the size of the risk pool. For example, if a subsidy is paid for covering 5% of the members, all of whom have to be means-tested as ultra-poor, then managers will have an incentive to enlarge scheme membership until they become entitled to cover the largest number of the poor. CBHIs have also developed a number of innovative approaches to make CBHIs affordable to the ultra-poor. In the Philippines ORT scheme, for example, an annual raffle is conducted to raise funds that are used to pay the premium costs for the poor (Barbin, Lamboy and Soriano 2003). Governments can encourage social solidarity by providing matching grants, or other forms of co-financing, for community-led initiatives that help finance participation of the destitute in CBHIs.

129. **Specific Subsidies Vs. Lump-Sum Grants.** In several cases, donors have provided lump-sum grants to CBHIs to help them finance all of their costs in the early years of operation. While well-intentioned, this can result in under-pricing premiums, discouraging managers from increasing the number of insured beneficiaries, and discouraging policy holders from participating actively in the design and management of the scheme. In some instances, donors have virtually guaranteed to pay all the deficits of a CBHI. In the case of the Nkoranza CBHI scheme in Ghana, this had an adverse effect on managerial performance and accountability. By contrast, in the West Gonja scheme, donor support was only provided in an emergency, and was linked to high standards of CBHI governance and managerial performance. In some cases, when donor start-up grants have been exhausted, CBHIs have had to sharply raise premiums, triggering an upsurge in non-renewals, and reducing the pool of policy holders. Providing subsidies for specific purposes, such as start-up expenses, lump-sum grants or guarantee funds, can help to ensure that the institutional incentives of the CBHI management and its members are appropriately aligned (Box 9).



### **Box 9: Options for CBHI Start-up Subsidies**

SEWA provides a health insurance scheme for 29,000 of its 270,000 female trade union members, the majority of whom work in the informal sector in the urban and peri-urban areas of Gujarat, India. In the late 1980s, SEWA opened a series of health centers and drug counters to improve the health care of its members. In 1990, SEWA members were encouraged to join health cooperatives, which were organized to improve access to primary health care services. In 1992, SEWA received an endowment grant of \$386,000 from GTZ to finance an insurance reserve. The reserve is used to generate interest earnings, to guarantee that premiums will be protected from unanticipated demands (i.e. from covariant risks), and to subsidize the premiums for the poorest groups. The financial cushion provided by the endowment grant enabled SEWA to take over the under-writing of health insurance policies in 1997, to extend health insurance into the rural areas in 1996, and to add hospitalization care for the husbands of insurance policy holders in the year 2000 (McCord, Isern and Hashemi 2002).

Charities have provided grants to a number of schemes to help defray their costs in the early years of operations. An example is the Nkoranza CBHI scheme in Ghana, in which Memisa, a Dutch Charity, under-wrote all of the costs of the scheme for the first three years of operation. This scheme, which revolves around a mission hospital, had a strong organization, good member identification, but low beneficiary participation in the early years. The latter has been attributed to the low (highly subsidized) premiums and limited bargaining power of members (Atim, Grey, Apoya, Anie and Aikens 2001).

## **E. Technical Capacity Building**

130. **Technical Capacity Building.** During the start-up phase and early years of operations, there is an urgent need for technical support and management capacity development. Technical support can play an important role by providing feasibility studies and assistance in setting premiums for benefit packages; providing the tools and skills necessary to design CBHIs policies and procedures to address insurance-related problems (i.e. moral hazard, cost escalation, adverse selection); helping to determine benefit packages and provider payment mechanisms; building capacity in accounting, auditing and budgeting; developing management tools and techniques, preparing organizational structures, statutes and regulations; in negotiating and contracting with third parties and other service providers; and with programming, monitoring and evaluation. To meet these capacity building objectives, governments and their donor partners have provided technical assistance and training to members of individual schemes, for training of local trainers and

coaches, for preparing how-to manuals and case studies, and by supporting the development of CBHI networks (Box 10).

### **Box 10: Developing Networks of CBHIs**

Helping small CBHIs to work together, in federations, partnerships or networks can expand the risk pool, provide greater bargaining power with health care providers, improve political voice, and provide access to sources of technical and administrative expertise. In parts of West and Central Africa, donors have assisted small-scale CBHIs in the development of regional federations of mutual health organizations. Development of CBHI networks is a complex process, and one whose pace and timing hinges on the interest and readiness of the member organizations.

Several international networks have been formed to support the development of CBHIs. ILO-STEP is the secretariat for a "Coordination Network" receives technical and financial support from other international partners besides STEP, l'USAID and its [PHRplus](#) program, [GTZ](#) and its health insurance project, l'[AIM](#), l'[ANMC](#), [WSM](#), [RAMUS](#), l'UNMS and MFP. Founded in 1999 in cooperation with key international partners in the area, the "Coordination Network" is active in 11 countries of French-speaking Africa. In 2002, the "Coordination Network" boasted over 150 members representing mutual health organizations, unions, federations, public structures, research centres, and support structures for mutual health organizations in Africa and at the international level. The "Coordination Network" provides a broad variety of services: a Website, a newsletter, a monitoring system for mutual health organizations and thematic workshops to support the mutual health organization movement. This network has agreed upon a set of principles, the Abidjan Platform, for the support of mutual health organizations (ILO 1998).

Association Internationale de la Mutualité (AIM) is a grouping of autonomous health insurance and social protection bodies operating according to the principles of solidarity and non-profit-making orientation. AIM's membership consists of 45 national federations representing 32 countries. They provide social coverage against sickness and other risks to more than 155 million people, either by participating directly in the management of compulsory health insurance or by offering supplementary, alternative or substitute coverage.

Donors have provided support for the preparation of a number of detailed manuals that provide guidance on the establishment and operation of CBHIs. See, for example, Brown and Churchill (1999) *Providing Insurance to Low-Income Households: A Primer* (USAID), ILO (2002), *Health Micro-Insurance: A Compendium, Strategies and Tools Against Social Exclusion and Poverty Programme*, Geneva.. ILO. 2004. *Guide de Gestion des Mutuelles de Sante en Afrique*, Geneva, and Conn and Walford. 1998. *An Introduction to Health Insurance for Low-Income Countries* (DFID).

## **F. Government's role in reinsurance and network development**

131. CBHI's are more likely to be successful in insuring against idiosyncratic rather than correlated risks. In the event of catastrophic risks---such as entire villages suffering from the adverse health and property loss effects of a natural disaster---the schemes tend to collapse. In small risk pools, there is a distinct limit to the degree in which correlated risks can be met. There may, therefore, be a role for government in providing catastrophic risk coverage, by providing guarantee funds or social reinsurance to cover for correlated risks. Access to social reinsurance can also improve the ability of the CBHIs to grow, can help stabilize financial results, protect against catastrophic loss, improve under-writing capacity, and help CBHIs manage sub-standard risk.

132. **Strengthening links with formal financing and providers.** Governments can play an important role by encouraging CBHIs to join networks to help pool small risks, and by helping to establish and strengthen links with the formal financing and provider networks. This can help to expand small CBHI risk pools, tap economies of scale in financing, management, and the contracting for health services, and enhance CBHIs access to institutions with scarce actuarial and financial management capacity.

133. Commercial reinsurance services do exist, but these are unlikely to be accessible to CBHIs. Commercial reinsurers must be certain that their primary insurers make good underwriting decisions, price their products appropriately, and have effective means for controlling risks. Before accepting a primary insurer, they must assess institutional and financial stability, policies and procedures of the insurer, and quality of staff and management. They will also evaluate the loss exposure and the terms of coverage of the product for which reinsurance is sought. Unregulated, and often under-capitalized, CBHIs are unlikely to gain access to the formal reinsurance market.

134. There are a variety of different forms of reinsurance, and what form would be appropriate hinges on the nature of the CBHI institutions involved, the nature of covariate and catastrophic health risks, and government's capacity to finance and operate a social reinsurance entity<sup>24</sup>. While the theoretical benefits of social reinsurance are widely understood, practical experience in this area in developing countries is limited to a small number of pilot trials from which few lessons can be conclusively drawn (Dror and Precker 2002, Fairbank 2003). There is merit, however, in Government playing an active role in assisting CBHIs to use reinsurance to enlarge the effective size of small risk pools, and to safeguard the schemes against catastrophic loss.

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<sup>24</sup> Reinsurance can be arranged in a number of different ways. It can take the form of quota-share systems, where the parties agree to share a proportion of all premiums and losses, surplus share (stop loss) arrangements, where the reinsurer agrees to cover losses above a certain limit, and up to an agreed maximum amount, and excess of loss arrangements, where the reinsurer only covers certain specified losses if the specified cause (epidemic, hurricane) caused the loss.

## **G. CBHIs and Public Health Interventions**

135. CBHIs can and do play an important role in health promotion, education and disease prevention. Health insurance can increase awareness of the link between individual attitudes to health and the cost of illness to the community. It is therefore important to assist CBHIs in strengthening their health promotion and education outreach activities.

136. Governments, and their development partners, have provided support for CBHI health promotion and education outreach in many different ways. In Nepal, CBHIs have evolved out of donor-assisted mother and child health care projects which included a strong community education component. In several countries, governments and donor agencies subsidize the hiring of doctors and community-health workers by a CBHIs to allow it to provide health education and other community-based support services to local communities.

## **H. Government's Regulatory and Supervisory Role**

137. Regulation and supervision is used in the insurance sector to afford reasonable assurance of future insurer performance (for example, meeting future liabilities), and to protect consumers who are often in a less favorable bargaining position than insurance companies. Absent regulation, there is a risk of fraud, unreasonable exclusions and restrictions, unchecked financial practices, and poor financial soundness, all of which can undermine the reputation of the insurance providers. Reputation is a "public good" in the insurance sector, and this can be maintained through self-regulation, public regulation or a combination of the two.

138. Health insurance regulation and supervision covers formation and licensing of insurers, financial status, rate setting, policy forms, and sales practices. Only those insurers that are qualified to offer service may be licensed. Typically, standards are set for financial performance and the riskiness of the insurance portfolio to ensure that claims can be met. Controls must be put in place to ensure that rates are fair and reasonable, and against discriminatory pricing or access restrictions. Regulations also set standards regarding the education and training that sales agents must receive, and to ensure that non-deceptive sales practices are used. Regulations also ensure that policies are clear and not misleading.

139. In virtually all countries acting as an insurer requires means coming under regulatory control. Moreover, any organization holding insurance risk without a license is operating illegally. But the cost of complying with national insurance laws is very high, and practically prohibitively so as far as CBHIs are concerned. In India, a minimum capital of \$21 million is needed to establish an insurance company. In South Africa, the minimum capital requirement is \$660,000 and the minimum surplus asset requirement is the greater of Rand 3 million or 15% of the insurer's net premium income. Insurance companies in South Africa are regulated by both the Insurance Ombudsman and the Financial Services

Regulatory Board, which impose strict accounting, auditing and reporting obligations (Aliber 2002). In 1992, the 14 countries of the West African Franc zone signed an agreement (Code des Assurances CIMA) to regulate all forms of insurance, including health insurance. CBHI doesn't fall under this agreement, nor would the region's mutual health companies be able to meet minimum capital requirements.

140. CBHIs generally practice some form of self-regulation, the primary purpose of which is to protect the policy holders. In a self-regulated CBHI, the reputation of the insurer, and the extent to which the interests of the policy holders are protected, hinges on the policies, rules and procedures established by the CBHI itself. Community awareness, participation, control and involvement in decision-making substitute for government regulation and supervision. Therefore, ensuring that communities are actively involved in CBHI design, management and oversight plays a crucial safeguard role.

141. Micro-insurance companies can suffer adverse reputation effects because of the absence of supportive regulation. In South Africa, for example, there were a number of fraudulent insurance agencies that offered "seasonal" funeral insurance, but did not have enough resources to keep their mortuaries functioning. Bad experiences with these fraudulent funeral insurance entities contributed to negative perceptions about micro-insurance as a whole (Aliber 2002).

142. In a few countries, CBHIs operate in direct contravention of the insurance laws. This is a risky situation, for policy holders may fear that the Government authorities will, at some point in time, close-down illegal insurers. In other countries, CBHIs are able to "legalize" their activities by registering as NGOs, mutual benefit societies, cooperatives, or other not-for-profit entities. In South Africa, for example, NGOs would not be able to register as insurance companies. But they can register under the Friendly Societies Act to sell insurance. In Burkina Faso, there are special laws for health micro-insurance schemes. These are classified as not-for-profit voluntary associations, under law 10/92/ADP, which assigns supervision responsibilities to the Ministry of Health and to the Ministry for Territorial Administration and Security (Aliber and Ido 2002) <sup>25</sup>.

143. Establishing a formal regulatory framework is not essential at the onset of the development of CBHIs, but becomes important over time, and should be developed in consultation with representatives of the local CBHIs. Establishing a simple registration procedure is useful, however, to ensure that CBHIs are understood by their members to be "legal" entities. As legal entities, CBHIs should be accorded the same fiscal treatment as other non-profit NGOs. Registration requirements could include simple criteria, such as the non-profit nature of the insurance scheme, maximum benefits per policy, and minimum solvency levels. This is how South Africa distinguishes between insurance companies and friendly societies. Mali is a pioneer in the creation of a national-level CBHI development

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<sup>25</sup> As of 2002, efforts were underway to transfer regulatory jurisdiction for Burkina Faso's CBHIs to the Ministry of Employment and Social Security. New guidelines for regulation and supervision were under preparation by that Ministry.

and support agency, the *Union Technique de la Mutualite Malienne*, which is jointly supported by the FAC and the Mali Government. Mali has drafted legislation specifically for its mutual health organizations to safeguard against fraudulent misuse of their contributions and to provide for external audits of their accounts.

144. Both the Ministries of Health, and the Ministries responsible for social protection (i.e. Labor, Welfare) have an interest in overseeing the development of CBHIs. Health Ministries play an important role in ensuring that CBHIs are well-integrated with other Government policies aimed at financing health care. The Ministries responsible for social protection have a role to play in ensuring that CBHIs to provide risk-management services in an efficient and effective manner, and that CBHI coverage is harmonized with other forms of social insurance and assistance. A combination of self-regulation with public oversight by the health and social protection authorities can help to ensure that CBHI's operate in a sound and sustainable manner.

145. One aspect of the regulatory setting that merits special attention is the extent to which micro-finance institutions (MFIs) are authorized to engage in the micro-insurance business. It can be dangerous to mix provision of micro-insurance with the delivery of micro-credit services because losses from insurance activities could negatively influence the banking business and therefore put deposits at a much greater risk. While MFI regulations should not specifically prohibit MFIs from diversifying into micro-insurance, the micro-finance institutions should be obliged to establish separate legal entities to take on insurance risk.

## **I. Monitoring and Evaluating CBHI Performance**

146. CBHIs are just one way in which social protection services can be provided and health risks effectively managed. It is therefore important that the performance of CBHIs be carefully monitored and evaluated.

147. There are three distinct categories of performance indicators. The first relate to the impact of the CBHI on health status, or on the utilization of health services. Measuring the actual impact of a CBHI on health outcomes may be impractical, because of the high cost of collecting health performance data for small groups of policy-holders, and because of the difficulties involved in isolating and attributing health performance to the contribution made by any single CBHI scheme. Most studies rely on proxy variables for health impact, such as the annual utilization of local health clinics and posts by CBHI policy holders, compared to similar, low-income uninsured populations (Box 11). A number of case studies show that CBHI members are able to access health facilities between 2 to 4 times per year on average, compared to substantially lower rates of utilization for low-income uninsured households. Indications that health service utilization are improving over time, in terms of capacity utilization of local health services, and annual visit frequency rates of

the insured population, can also be used to assess the impact of a CBHI on local health status (Asenso-Okyere et. al. 1998)<sup>26</sup>.

148. A second set of indicators relate to the efficacy of a CBHI as a financial risk-management instrument. Financial risk has two dimensions---how frequently an event may occur, and how great the risk is for each event. CBHI's tend to cover some combination of both extremes (rare and more frequent events). If a CBHI has made medical care more affordable, it is also likely to have made it more accessible. Financial protection, in this respect, means that a household doesn't spend an excessive portion of their income to gain access to health care and that households aren't required to engage in impoverishing risk-coping strategies (i.e. borrowing from money-lenders, sale of productive assets) to meet health costs. Qualitative surveys of coping strategies, in which risks are identified, ranked and means that households use to cope with different risks identified, can be used to assess the extent to which CBHIs do provide such financial protection (Cohen and Sebstad 2003).

**Box 11 : Monitoring and Evaluating Performance of CBHIs (*les mutuelles des santes*) in the Thies region of Senegal**

Jutting (2003) has assessed the impact of mutual health insurance on health care service utilization in the Thies region of Senegal. This is a region that has had more than a decade's experience with CBHIs. In that area, low-cost, high-frequency events are covered by the extended family, while high-cost, low frequency hospitalization risks are covered by the CBHIs. Jutting finds that the insured are more likely to use health facilities; membership has a strong positive effect on the probability of going to a hospital; and on average, members pay less than half the amount that non-members pay for each hospitalization. But coverage for emergency risks is limited: members do have to pay substantial co-payments and benefits are limited to 10-15 days of hospitalization. For the average household, the premium cost is equivalent to 2% of household income, while a household can expect that a member would need to be hospitalized once every two years. A single stay can cost 25% of a household's income, excluding indirect costs (labor lost, reduction in productivity). Women and the elderly were more like to make use of health services, and the higher the incomes, the greater the family expenditures on health care. Mutuals with a greater proportion of high income persons, and those living in closer proximity to the hospital, tended to make greater use of health facilities. Jutting reports that the probability of joining a health-mutual in Senegal is a function of income: those with higher incomes are over-represented in the programs and the poorest of the poor are hardly reached. He concludes that the main key to success was the logistical, administrative and financial support of the main health care provider, which in this case was the missionary hospital St. Jean de Dieu.

Source: Jutting, Johannes. 2003. "Do Community Based Health Insurance Schemes Improve Poor People's Access to Health Care: Evidence From Rural Senegal", World Development, Volume 32, pp. 273-288.

149. The number of members, and their growth over time, can be used as proxies to measure the extent to which an insurance program has made health care more affordable. This is based on the presumption that policy holders wouldn't join CBHIs, or remain enrolled as members, if the financial risk-management benefits that they receive are not worth the costs that they bear.

150. Another set of indicators that are commonly used for measuring the efficacy of a CBHI as a financial risk-management instrument are "out of pocket expenses" for healthcare. This includes measures of out-of-pocket expenses for health care in total, for specific categories of healthcare (i.e. emergencies), and for services offered by specified providers. If these are higher for uninsured families; if they are within an affordable bounds for health emergencies; or if these have fallen substantially after the introduction of a CBHI; than this would indicate that the CBHI is making a positive contribution as a household risk management instrument.

151. Another dimension of the influence of CBHIs on the affordability of healthcare is the extent to which the insurance scheme has been able to negotiate discounted rates for its members. When a CBHI provides a significant proportion of a health care provider's business, these programs have the potential to negotiate a price reduction. For example, because Kenya's MediPlus CBHI was able to cover 80% of the total client's of the Purple Heart's clinic, they were able to negotiate for and receive substantial discounts on care (McCord et. al. 2002).

152. The extent to which a CBHI improves the health risk management capabilities of the poor and vulnerable groups is an important indicator of its contribution to a nation's social protection system. The impact of a CBHIs on the health of a community will be greater if it is accessible to the poor and vulnerable. Indicators such as the % of women and child beneficiaries, and the % of the total beneficiaries considered to be poor (by the community) are low-cost ways that some CBHIs use to monitor program inclusiveness.

153. The third set of indicators relates to the performance and sustainability of the CBHI itself. Many CBHI schemes are new. Careful monitoring and evaluation is important to diagnosis factors that may impede performance and which, if left un-checked, could undermine sustainability. From a social protection vantage point, a CBHI that is financially unviable, badly governed or operates in an unsound manner, is unlikely to be a sustainable health risk management device. Some of the key CBHI performance variables include:

- **Enrollment size:** sheer numbers enrolled give some financial security since the standard deviation of random fluctuations around the mean benefit costs are inversely proportional to enrollment. As the risk pool gets larger it comes closer to the average utilization of a large population.



- **Claims cost coverage:** if CBHIs are not covering their claims cost, and if reserves are not sufficient to cover expected claims, this can lead to growing deficits to clinics, service refusals, and dwindling premium payments. Ensuring that adequate resources are available to meet claims is a key determinant of financial sustainability.
- **Participation indicators:** the greater the degree of participation, the lower the administration costs and the higher the potential for self-monitoring to enforce scheme compliance. Indicators such as the % of members participating in the general assembly are a good proxy for the extent of regular participation.
- **Management efficiency indicators:** Some of the key tracking ratios of management efficiency include ratio of premiums paid to expenditures, ratio of premiums owed to premiums paid, ratio of the number of insured to the number of CBHI staff, time required to pay claims, and the ratio of administrative costs to premium income (ranges from 5 to 12% for more stable CBHIs).
- **Client Satisfaction:** Retention is an important indicator of client satisfaction, and its converse, the non-renewal rate, measures the extent to which policy holders are not satisfied with a CBHI. People have choices about which strategies they will follow in the financing of their health care needs. When they believe they have an option that better suits their needs than the CBHI, they can and do shift their strategies.

154. CBHOs are not exclusively about financing or health risk management. Other possible benefits from CBHI include community participation, voice, empowerment, social solidarity, access to health information and the creation of new partnerships for health. All of these can and should be monitored and evaluated. Case studies, such as those prepared by ILO (2000 and 2003), Aliber and Ido (2002), Atim (1998), Jutting (2003), McCord (2001), Musau (2004), Soriano (2002), and Yap (2002) are useful ways of assessing the extent to which CBHI's have contributed to better health access and have made a broader contribution to community development. Case studies also provide lessons about the design, management, performance and evolution of CBHIs that is useful for training purposes.

155. Many evaluations of CBHIs pay too much attention to the technical and financial details of the scheme itself, and too little to the human factor inherent in the organization, management and interaction between partners. More attention in CBHI design and evaluation should be accorded to the health service demands of the population, the integration of the scheme into the local health system, and the broader role of the CBHI in the social, cultural and economic environment. Such information will help in identifying those facets of the CBHI context that exert a powerful influence on scheme performance and sustainability (Waelkens and Criel 2004).

156. **Filling the CBHI Knowledge Gap.** Despite numerous studies and evaluations, there is relatively little that is known about the degree to which CBHI's are a cost-effective health risk management device. There is a compelling need for operational research to compare the health outcomes of those with and without CBHI coverage; for more detailed comparisons of the costs and benefits of CBHI schemes vis-à-vis other forms of health financing; for randomized control testing of CBHI intervention approaches; and for assessment of the dynamic effects of such schemes (Ekman 2004). Better knowledge of the efficacy and efficiency of CBHIs can help public policy makers design better ways of helping CBHIs grow, while helping the poor to more effectively manage health risks.

## V. Conclusions

157. CBHIs are amongst the oldest instruments used for collectively managing health risks in the world, but they are new, and yet to be fully tested, in most parts of the developing world. Their role in risk management varies by region. In Central and West Africa, Bangladesh, China and Argentina, their numbers, membership and maturity has reached the point at which a community health insurance "movement" is well underway. But in many developing countries, CBHI coverage and membership still remains very small, and where it is offered, coverage has been limited to the "better off" group of rural households.

158. CBHIs can play a useful risk protection role and in so doing, complement a sound public health care effort. CBHIs provide poor households with the financial means to access publicly-provided healthcare services. They also provide households with the financial wherewithal to tap preventative and primary health care services, to reach private providers, and to improve health education and awareness.

159. CBHIs main contribution to extending social protection to disadvantaged sections of the population is by mainly targeting people in the informal and rural sectors. By reaching those who would otherwise have no financial protection against the cost of illness, they also contribute to equity in the health sector. Thanks to the way they are organized and managed, they also contribute to fostering democratic governance (in the villages and of the healthcare sector) and social solidarity.

160. On the other hand, very few people in the developing nations are actually covered by a CBHI scheme, and it is not easy to scale-up one successful CBHI experience to another. In practice, the need to pay premiums may effectively exclude participation by the poorest; the risk pool may be too small for efficient insurance; many schemes are heavily dependant on donor subsidies; financial and managerial difficulties are common; and sustainability is not always assured. Moreover, the very contextual factors that determine a CBHIs' success---social capital, local leadership and volunteerism---may be difficult to replicate.

161. Difficulties aside, scaling-up CBHIs is an investment worth pursuing. Empowering informal sector households, including the poor, to better manage their health risks, in a financially efficient and effective manner, can be an important part of solution to the complex nexus of poverty and health problems. Over time, public support to weave the development of CBHIs into an evolving social protection system can make an important contribution to poverty reduction by providing poor communities with the financial tools, technical and management capacity, needed to better manage critical health risks.

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